

GOVERNOR'S COMMISSION
TO REVIEW CALIFORNIA WATER RIGHTS LAW

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NOTICE OF COMMISSION MEETING

NOTICE IS HEREBY GIVEN that the Governor's Commission to Review California Water Rights Law will meet on Thursday, December 8, 1977, at 9 a.m. in the Auditorium of the State Building, 31 East Channel Street, Stockton, California. The Commission at this meeting will hold a workshop on the present law regarding riparian water rights in California and possible modifications of that law. Information on this topic is provided in "Riparian Water Rights in California - Background and Issues", a staff paper available on request from the Commission. The "issues" portion of this paper will serve as the basis for the workshop agenda.

Members of the public who wish to testify at this meeting are requested to notify the Commission by December 1, 1977.

Topics under review by the Commission are appropriative water rights in California, groundwater rights in California, the legal aspects of water conservation in California, riparian water rights in California, the transfer of water rights in California, and the legal aspects of instream water uses in California. Written comments from the public on any topic under review by the Commission are welcome at any time. They will be most useful if submitted by February 1978, at which time the Commission plans to complete the initial, educational phase of its work. The Commission's report to the Governor is due by December 31, 1978.

Dated: November 8, 1977

GOVERNOR'S COMMISSION TO REVIEW
CALIFORNIA WATER RIGHTS LAW

A handwritten signature in cursive script that reads "Harrison C. Ounning".

Harrison C. Ounning
Staff Director

GOVERNOR'S COMMISSION
TO REVIEW CALIFORNIA WATER RIGHTS LAW

RIPARIAN WATER RIGHTS IN CALIFORNIA

Background and Issues

by

David B. Anderson

Staff Paper No. 4

November 1977

THIS PAPER HAS NOT BEEN REVIEWED
OR APPROVED BY THE COMMISSION

This paper is part of a series of background and issue papers prepared by the staff of the Governor's Commission to Review California Water Rights Law. The background material is intended to assist persons who may lack detailed knowledge of California's water rights law and procedures. The issues have been listed as a basis for discussion by the public and for the Commission when it considers various legislative options. Initial papers in the series are as follows:

- Staff Paper No. 1: Appropriative Water Rights
in California
- Staff Paper No. 2: Groundwater Rights
in California
- Staff Paper No. 3: Legal Aspects of Water
Conservation in California
- Staff Paper No. 4: Riparian Water Rights
in California
- Staff Paper No. 5: The Transfer of Water Rights
in California
- Staff Paper No. 6: Legal Aspects of Instream
Water Uses in California

* * * * *

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RIPARIAN WATER RIGHTS IN CALIFORNIA

I. Introduction

Riparian rights have been part of California water rights law since California became a state. "Riparianism" has been a battleground at times, the basic issue being whether riparian rights should be recognized at all in a semi-arid region. In the 1870's and 1880's, appropriative rights supporters vigorously fought riparianism, ^{1/} and went so far as to form an "Anti-Riparian League." ^{2/} Immediately after Lux v. Haggin was decided in favor of the riparians in 1886, ^{3/} the Legislature repealed a provision in the Civil Code which had provided that riparian rights were "not affected" by the prior appropriation sections of the Code. ^{4/} The debate continued and culminated in the adoption of the 1928 Constitutional Amendment, which limited riparians to reasonable beneficial uses vis-à-vis appropriators. ^{5/}

A. Nature of the Riparian Right

The riparian right is an incident of the ownership of land which abuts a stream, lake or pond. ^{6/} The California courts have said that

^{1/} Shaw, "The Development of the Law of Waters in the West", 189 Cal. 779, 790-91 (1922).

^{2/} S. T. Harding, Water in California 39 (1960).

^{3/} Lux v. Haggin, 4 P. 919 (1884), 69 Cal. 255, 10 P. 674 (1886).

^{4/} 1887 Cal. Stats. 144. See also 1 S. Wiel, Water Rights in the Western States, 3 ed., 136-37 (1911).

^{5/} Cal. Const. art. 10, sec. 2.

^{6/} "Riparian" derives from the Latin "ripa", meaning "the banks of a river, or the place beyond which the waters do not in their natural course overflow." Black's Law Dictionary, Rev. 4th ed., 1490 (1968); See Craig, "California Water Law in Perspective", Cal. Water Code LXIX (West 1971).

the right is not a "mere easement or appurtenance" but is part and parcel of the riparian real estate. ^{7/} The riparian right is a "usu-fruct": The right is to the use of water; there is no private property in the corpus of the water itself. ^{8/} But the right is not created by use and is not lost by nonuse. ^{9/}

The riparian owner's right to use water is shared with other riparian landowners on the watercourse. A riparian has no right to a fixed quantity of water as against other riparians, but rather has a right to the use of the stream in common with the equal and correlative rights of other riparians. ^{10/} The right is limited to use on riparian land. The riparian right to the use of a watercourse coexists in California with several other types of rights, of which the appropriative right is of particular importance. ^{11/}

B. Extent of Riparian Rights in California

The amount of water under claim of riparian right is not known. Several factors contribute to this uncertainty. Riparian rights are, by definition, not quantified; a riparian does not have a right to any specific amount of water, but has a correlative share in a stream in common with other riparians. Riparian rights are not subject to the permit system and are not subject to a strong recordation requirement. No attempt has ever been made to inventory riparian lands for all of

^{7/} 2 W. Hutchins, Water Rights Laws in the Nineteen Western States 26 (1974).

^{8/} Gould v. Eaton, 117 Cal. 539, 542, 49 P. 577 (1897); Seneca Consolidated Gold Mines v. Great Western Power Co., 207 Cal. 206, 287 P. 93 (1930).

^{9/} Peake v. Harris, 48 Cal. App. 363, 192 P. 310 (1920).

^{10/} Prather v. Hoberg, 24 Cal.2d 549, 150 P.2d 405 (1944).

^{11/} See M. Archibald, Appropriative Water Rights in California (Governor's Commission to Review California Water Rights Law, Staff Paper No. 1, 1977).

California. Studies have been made for particular purposes which provide some data on riparian use, but these studies encompass only a few areas in the State.

The extent of riparian rights in California has been discussed in the literature. In 1922, Chief Justice Shaw wrote:

As a net result of prescribing against riparians and obtaining rights of access from riparians the irrigated land in the state is almost all non-riparian, and the existence of the riparian right has not prevented the beneficial use of the greater part of the waters of the streams. 12/

Hutchins, in 1956, agreed that "Most of the irrigation development of surface waters in the State by large irrigation projects has been accomplished with the exercise of appropriative water rights." 13/

But he added:

Development by riparian landowners in exercising their riparian water rights has nevertheless, in various areas, been substantial. The riparian doctrine is important in the irrigation economy of California. From a legal standpoint it is of fundamental importance. 14/

Rogers and Nichols concluded, in 1967, that:

With only limited exceptions, all rights to waters of non-navigable streams in California were originally riparian. Almost all rights existing today to riparian stream waters have been acquired by grant, prescription, appropriation, condemnation, contract from riparians, or abridged by the police power of the 1928 Constitutional Amendment. 15/

Uncertainty as to the amount of water used by riparians and pre-1914 appropriators moved the Legislature in 1965 to provide for "statements of water diversions and use" to be filed with the State Water Resources Control Board. 16/ These statements are "for informational

12/ Shaw, "The Development of the Law of Waters in the West", 189 Cal. 779, 791 (1922).

13/ W. Hutchins, The California Law of Water Rights 178 (1956).

14/ Id.

15/ 1 H. Rogers and A. Nichols, Water for California 216-17 (1967).

16/ 1965 Cal. Stats. 3358, ch. 1430. Cal. Water Code Section 5100 et seq. (West 1971).

purposes only" and there is no penalty for failure to file. ^{17/} Only about 10 percent of the diverters who should file have done so, and the information which has been filed has not been summarized. ^{18/} The information itself, though, may not be useful, since accurate, uniform determinations of quantity are not required and the type of right claimed is not required to be stated.

Other sources of information on riparian use such as watermaster reports are not helpful, since generally they do not itemize rights of use by type of right and do not, in any case, encompass very large amounts of water. Proofs of claim filed in statutory adjudications often claim several bases of right, and rights finally determined in a statutory adjudication are assigned various priorities which are not necessarily described by type of right. ^{19/}

Several major studies have been done which do provide estimates of riparian use in certain areas. The most important of these is the 1956 Cooperative Study Program. ^{20/} This program was initiated by the California Department of Water Resources, the United States Bureau of Reclamation, and the Sacramento River and Delta Water Association. The purpose of the study was to provide a basis for the negotiation of

^{17/} Cal. Water Code Section 5108 (West 1971). But, under Section 5105, the Board may investigate and determine the facts required by the reporting sections at the expense of the water user who fails to report.

^{18/} Interview with Mr. Glenn R. Peterson, Division of Water Rights, State Water Resources Control Board, September 8, 1977. Mr. Peterson estimates that 10,000 statements have been filed.

^{19/} Id.

^{20/} California Department of Water Resources, Assumptions as to Water Rights Supplement to Report on 1956 Cooperative Study Program (April 1958). This supplement contains information on water rights, and assumptions made pertaining to those water rights, that were made in the 1956 Cooperative Study. The basic report is the Report on 1956 Cooperative Study Program, Water Use and Water Rights Along Sacramento River and in Sacramento-San Joaquin Delta (March 1957).

contracts between the Bureau and Sacramento mainstem and Sacramento-San Joaquin Delta diverters for Bureau water made available because of operation of the Shasta Division of the Federal Central Valley Project. ^{21/} The determination of water rights in the Sacramento River and Delta was the primary purpose of the 1956 Cooperative Study and earlier studies:

Lack of a clear definition of the rights of water users on the river, in relation to each other and in relation to the United States, has been largely responsible for the difficulty in determining what payments the water users should make for the benefits they receive from the use of releases of stored water from Shasta Dam. ^{22/}

^{21/} Interview with Mr. Gleason Renoud, former chief, Water Rights Engineering Branch of the Bureau of Reclamation, Aug. 25, 1977.

^{22/} United States Department of the Interior, Memorandum Report on Sacramento River Water Diversions California 3 (1963). In 1938, the Bureau was assigned "State Filings" which held a 1927 priority date (Cal. Water Code Section 10500 et seq. (West 1971)). In the mid-1940's some unsuccessful efforts were made to determine Sacramento River water usages and water rights. Many studies were made, and in 1952, when the Bureau received additional assignments of State filings, the Bureau, Department, and the Sacramento Valley Water Users Association agreed to a "Memorandum of Understanding Relating to a General Approach to Negotiations for Settlement of Water Diversions from the Sacramento River and the Sacramento-San Joaquin Delta with the Objective of Avoiding Litigation." In 1954 and 1955, "Trial Run" agreements were executed. (Between 1954 and 1955, the Sacramento River and Delta Water Association came into existence.) Proposed contracts were sent to water users in 1962, but none were executed. Those contracts divided each contractor's total water entitlement between base supply (to be available without charge) and project water (\$2 per acre-foot). The main issues were the division between base and project supply, application of the 160-acre limitation, and provisions for the development of substitute water supplies. Under the Bureau's Water Rights Settlement Program, 99 percent of Sacramento River mainstem diverters have now signed contracts with the Bureau. The Memorandum Report (p. 24) recommended:

For contracting purposes, it is recommended that the Delta area, including both the Delta Lowlands and Uplands, be separated from the river area above Sacramento. It is further recommended that contract negotiations with the Delta Uplands

The 1956 Cooperative Study included ten different studies of water uses and rights. The ten studies were made on the basis of varying water rights and water requirements assumptions to determine how much pre-project water was available from April through October each year to water rights holders. The period from 1924 through 1954 was studied, and both riparian and appropriative rights were estimated.

Riparian rights during the principal irrigation season of April through October along the Sacramento River mainstem were found to be 370,300 acre-feet and riparian rights of the Delta lowlands were 1,059,000 acre-feet, for a total of 1,429,300 acre-feet. ^{23/} It is important to note the assumptions upon which these figures were based:

In view of the wide differences in results among the various studies made to date ... it is evident that there are widespread differences of opinion with respect to proper basic assumptions. In the absence of a court adjudication, no one today is in a position to state authoritatively which of the many possible assumptions will ultimately prevail. ^{24/}

Assumptions upon which the riparian rights figures were based include:

and Lowlands be held abeyant until an equitable basis is developed for evaluation of project benefits to the Delta area, including, among other relevant factors, the consideration of the Delta storage concept. The precise weight to be given to any particular factor calls for the application of informed judgment in the process of negotiations.

^{23/} California Department of Water Resources, Assumptions as to Water Rights Supplement to Report on 1956 Cooperative Study Program, Table 26 (April 1958). This report also concludes, at p. 11-12, that estimated riparian rights along the American River from Fair Oaks to its mouth total an additional 11,000 acre-feet for the principal irrigation season. Riparian rights figures for the Sacramento River mainstem are for diversions, whereas riparian rights figures for the Delta are for consumption of water.

^{24/} United States Department of the Interior, Memorandum Report on Sacramento River Water Diversions California 15 (1963).

1. On the basis of title reports, physically riparian land was mapped from Sacramento to Redding (not to Shasta) for all present and old channels of the Sacramento River. Only parcels which had been in continuous ownership since the date of patent were included, so that severed back parcels for which riparian rights were retained were excluded. Riparian lands determined not to be susceptible to irrigation were also excluded. 25/
2. It was assumed that the Sacramento River riparian lands would eventually all be developed for irrigation and that 85 percent of the riparian lands would be irrigated each year, which would require 370,300 acre-feet of water. 26/
3. Where assumed riparian lands were overlapped by the places of use designated in applications, permits, or licenses for appropriative rights, the overlapped area was treated as being riparian and not appropriative. 27/
4. The Delta was divided into the "Delta Lowlands" and "Delta Uplands"; Delta Lowlands are lands at elevations of five feet or less above sea level. The assumption was made that all Delta Lowlands are riparian to Delta channels and that Delta Uplands are not riparian. 28/

Besides the Sacramento River and Delta study, riparian rights in two other large areas have been studied intensively. They are the Feather, Yuba, and Bear Rivers, studied in conjunction with the State

25/ California Department of Water Resources, Assumptions as to Water Rights Supplement to Report on 1956 Cooperative Study Program 6-9 (April 1958).

26/ Id. at 9-10.

27/ Id. at 11-12.

28/ Id. at 12.

Water Project's Feather River Division, and the San Joaquin River and tributaries, studied in conjunction with the Bureau of Reclamation's Friant-Kern and Delta-Mendota Divisions of the Central Valley Project.

The Department of Water Resources inventoried water rights in the Feather River Project area before the project was under way:

It was known that agreement to the entitlement of the waters of the Feather River required settlement before the successful operation of any project could be contemplated. The difficulty of the negotiations between the Bureau of Reclamation and the local water users of the Sacramento River pointed out that these agreements should be reached before the project was constructed. ^{29/}

The Department published the water rights data it accumulated in Bulletin No. 140. ^{30/} According to that report, the "diversion allowance" for assumed riparian rights along the Feather, Yuba, and Bear Rivers for the principal irrigation season of seven months was 295,449 acre-feet. ^{31/} The Department based its determinations on certain assumptions, as did the Bureau, pertaining to the extent of the physically riparian lands, the extent of those riparian lands that are irrigable, and the amount of the "diversion allowance" based on historic diversion records. ^{32/}

No unified study was done on water rights to the San Joaquin River and its tributaries in conjunction with the Central Valley Project. The Bureau of Reclamation signed individual contracts with riparians and

^{29/} California Department of Water Resources, Bulletin No. 140, Water Rights Data and Estimated Entitlements to the Flow of the Feather River, 5 (1965).

^{30/} Id.

^{31/} Id. at Table 4. The 295,449 acre-feet figure is derived: $(29,579 + 2,958 + 9,670 \text{ AF/mo.}) \times 7 \text{ mo.} = 295,449 \text{ AF.}$

^{32/} Id. at 119-23.

other water rights holders, but there is no one compilation of data that indicates the amount of water used under riparian rights. ^{33/}

Over all, there is not a great deal of readily usable data on the amount of water used under claim of riparian rights in the State. Total use based on the Sacramento and Feather River studies is 1,724,749 acre-feet for the irrigation season of seven months. ^{34/}

The only other figure which may be helpful is an estimate, based on extrapolation from a 1920 Bureau of Census figure for irrigation, that in 1914 riparian use was approximately 1,617,000 acre-feet for the entire State. ^{35/}

^{33/} Mr. George Wilson, United States Bureau of Reclamation (interview September 28, 1977). A number of the Bureau contracts, especially the Miller and Lux contracts, are discussed in Rank v. Krug, 142 F. Supp. 1 (1956).

^{34/} It should be noted that the Delta figure is for consumption of water, and the other figures are for diversions.

^{35/} Mr. Glenn A. Peterson, Engineer, State Water Resources Control Board, Division of Water Rights (interview July 29, 1977). The data used was found in the United States Department of Commerce, Bureau of Census, "Fourteenth Census of the United States Taken in the Year 1920--Irrigation and Drainage", Tables 4 and 6. On the basis of the 1,617,000 acre-feet 1914 figure, and the Cooperative Study figure of 1,429,300 acre-feet, Mr. Peterson estimated that a very rough figure for total annual riparian use in California is 3,000,000 acre-feet.

II. Historical Development

A. Riparianism in England and the Eastern United States

The doctrine of riparian rights came to the United States as part of the common law of England. In England the right to use water obtained as a right of access to waterways. ^{36/} A "community interest", predicated upon free and public access to water, had been recognized historically. ^{37/} By the nineteenth century, however, all streams "were absolutely enclosed on all sides by privately owned land. The owners of the enclosing land alone had access to water." ^{38/} By this time the use of water was established as exclusively a private right based on the ownership of riparian land. "The law of riparian rights grows out of this exclusion of non-riparian owners because they have no access to the water." ^{39/}

The riparian rights doctrine was uniformly adopted in the humid Eastern United States, where water was abundant and where irrigation was generally unneeded for the cultivation of land not contiguous to water courses. In recent years, however, eleven of these states have statutorily modified the common law riparian doctrine. Eight of them have created permit systems, either for all riparian uses or for prospective riparian uses. Iowa's enactment of a comprehensive permit system ^{40/} for both existing as well as future riparian uses was prompted by a potential water shortage during the drought years of 1949 to 1955

^{36/} 1 S. Wiel, Water Rights in the Western States 749, 758 (1911),
^{37/} Maloney, A Model Water Code 166 (1972); see also Lauer, "The
Riparian Right as Property" in Water Resources and the Law 133,
184 (1958).

^{38/} 1 S. Wiel, Water Rights in the Western States, supra, at 758.

^{39/} Id. at 759; see also Lauer in Water Resources and the Law, supra,
at 162-63.

^{40/} 25 Iowa Code Ann. Sec. 455 A, (West 1971).

and a concurrent increasing reliance on supplemental irrigation. ^{41/}
Florida, like Iowa, has enacted legislation requiring permits for all
riparian uses. ^{42/}

Delaware, ^{43/} Kentucky, ^{44/} North Carolina, ^{45/} Minnesota, ^{46/}
Maryland, ^{47/} and Mississippi ^{48/} have established permit systems for
future uses by riparians. In Mississippi the priority of right to
future uses is determined by the temporal priority of use. ^{49/} New
Jersey ^{50/} and Wisconsin ^{51/} adopted permit procedures which apply only
to certain specified areas within the state.

B. Riparianism in the Western United States

The history of riparian rights in the West is fundamentally different from that in the East. The West generally did not have the numerous streams and humid conditions of the East, and it did have water needs for gold mining and irrigation essentially unknown in the East. Additionally, a large percentage of land in the West belonged to the federal government. Much of the use of water in the West was made initially on public land or by means of diversions located on the public domain, which land only later passed into private ownership by federal patents.

^{41/} N. Hines, "A Decade of Experience Under the Iowa Water Permit System - Part One", 7 Natural Resources Journal 449, 504 (1967).

^{42/} Fla. Stat. Ann. Secs. 373.013 to 373.616 (West Supp. 1972).

^{43/} Del. Code Ann. tit. 7, Sec. 6101 et seq. (1975).

^{44/} Ky. Rev. Stat. Secs. 151.010 to 151.990 (1971).

^{45/} N.C. Gen. Stat. Secs. 143.215.11 to 143.215.22 (1974).

^{46/} Minn. Stat. Ann. Secs. 105.37 to 105.55 (West 1977).

^{47/} Md. Nat. Res. Code Ann. Secs. 8-802 to 8-814 (1974).

^{48/} Miss. Code Ann. Sec. 51-3-7 (1973).

^{49/} Id.

^{50/} N.J. Stat. Ann. Sec. 58:1-35 et seq. (West 1966).

^{51/} Wis. Stat. Ann. Secs. 30.18, 107.05 (West 1973).

This situation raised two important related questions in the West: What water rights, if any, accompanied land patented to private persons by the government? And did a state have the power to adopt its own water rights system? Some states viewed these matters as issues that the states could decide for themselves under their own sovereign powers. ^{52/} Generally the courts and commentators, however, viewed federal law as controlling; and in the absence of any federal law governing water rights to federally patented lands, concluded that state water rights laws controlled. These conclusions were based variously on federal acquiescence, ^{53/} federal grant, ^{54/} or principles of agency. ^{55/}

In 1935 the United States Supreme Court addressed these issues in California Oregon Power Company v. Beaver Portland Cement Company. ^{56/} The court declared that the Desert Land Act of 1877 ^{57/} effected a severance of water rights from federally patented lands:

What we hold is that following the Act of 1877, if not before, all non-navigable water, then a part of the public domain, became publici juris subject to the plenary control of the designated states...with the right in each to determine for itself to what extent the rule of appropriation or the common law rule in respect of riparian rights should obtain. ^{58/}

^{52/} Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882).

^{53/} Basey v. Gallagher, 87 U.S. 670 (1875).

^{54/} Meyers, Historical and Functional Analysis of the Appropriation System, (National Water Commission Legal Study No. 1, p. 30, 1971).

^{55/} Sax, "Federal Reclamation Law" in 2 Water and Water Rights 174, R. Clark, ed. (1967).

^{56/} 295 U.S. 142 (1935).

^{57/} Act of March 3, 1877, Ch. 107 Sec. 1, 19 Stat. 377 (43 U.S.C. Sec. 321).

^{58/} 295 U.S. 142 at 163-64. While legal scholars continue to debate the issue, finding conceptual flaws in the court's reasoning and noting the temporal and geographical limitation of the Desert Land Act of 1877, what is important at this point is the Supreme Court's recognition of the state's power to choose a water law system.

Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona and New Mexico rejected the riparian doctrine essentially from the outset in favor of the prior appropriation system. ^{59/} These "Colorado doctrine" states noted generally that the riparian doctrine is inappropriate to arid regions. ^{60/} The correlative rights and watershed limitation aspects of the riparian doctrine were at odds with the need for extensive irrigation systems to bring vast areas of semi-arid or arid non-riparian land under cultivation. ^{61/}

California, Oregon, Washington, Texas, Oklahoma, Kansas, North and South Dakota, and Nebraska (the "California doctrine" states) recognized both riparian rights and water rights gained by prior appropriation. ^{62/} Since the turn of the century, all of these states have, by statute, judicial decision, or otherwise, limited the application of the riparian doctrine. Many of these states have generally noted the inability of the riparian rights doctrine to meet the growing need for water for irrigation and municipal uses. ^{63/}

Oregon was among the first of the California doctrine states to limit riparian rights, and it provided a prototype for later actions in other states. In its Water Code of 1909, ^{64/} the Oregon Legislature

^{59/} See Drake v. Earhart, 2 Idaho 716, 23 P. 541 (1890); Metler v. Ames Realty, 6 Mont. 152, 210 P. 702 (1921); Moyer v. Preston, 6 Wyo. 308, 44 P. 845 (1896); Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882); Clough v. Wing, 5 Ariz. 530, 17 P. 453 (1888); Stowell v. Johnson, 7 Utah 215, 26 P. 290 (1891); Reno Smelting, M&R Works v. Stephenson, 20 Nev. 269, 21 P. 317 (1889); Trambley v. Luterman, 6 N.M. 15, 27 P. 312 (1891).

^{61/} Clough v. Wing, 5 Ariz. 530, 17 P. 453 (1888).

^{62/} 2 W. Hutchins, Water Rights Laws in the Nineteen Western States, supra, at 2-14.

^{63/} Williams v. City of Wichita, 190 Kan. 317, 374 P.2d 578 (1962); In re Hood River, 114 Or. 112, 227 P. 1065 (1924).

^{64/} Or. Rev. Stat. Sec. 539.010 et seq. (1975).

dedicated all water of the state to the public, ^{65/} subject to vested water rights. Vested rights were limited to amounts of water which were actually being applied to beneficial uses prior to the enactment of the statute or which would be diverted and used from works in progress undertaken in good faith prior to the date of enactment and completed within a reasonable time thereafter. ^{66/} It also provided for the adjudication and quantification of existing riparian rights upon petition to the State Engineer. ^{67/} The effect of the act was to limit the riparian right for all time to the quantity of water used under riparian claim before 1909 or shortly thereafter.

Kansas followed in 1945 with the passage of a comprehensive water code ^{68/} based upon the Oregon model. Under this code water was dedicated to the state ^{69/} and provision made for the protection of all vested rights in water to the extent water held under these rights had actually been put to beneficial use prior to the enactment of the statutes. ^{70/} The State Engineer was given the power to gather data necessary for the determination of all vested rights. ^{71/} South Dakota adopted a similar comprehensive water law in 1955, ^{72/} but it contained no data gathering provision.

In 1963, North Dakota repealed a statute originally enacted in 1866 which recognized riparian rights. ^{73/} In 1968, the North Dakota Supreme

^{65/} Id. Secs. 537.110, 537.120.

^{66/} Id. Sec. 539.010(2).

^{67/} Id. Sec. 539.010(7).

^{68/} Kan. Stat. Secs. 829-701 to 829-725 (1969).

^{69/} Id. Secs. 82a-702, 82a-703.

^{70/} Id. Secs. 82a-701, 82a-702.

^{71/} Id. Sec. 82a-704.

^{72/} S.D. compiled Laws Ann. Sec. 46-1-9 (1967).

^{73/} 1963 N.D. Sess. Laws, ch. 419, Sec. 7.

Court held that the 1866 statute protected rights which had been vested prior to 1963, but only to the extent to which they actually had been applied to beneficial use. ^{74/}

In 1967, Washington ^{75/} and Texas ^{76/} both enacted statutes based on the Oregon statutes. The statutes of both states made recordation of claimed rights mandatory and provided that failure to record would result in waiver of any claim of right. ^{77/} In addition, the Washington statutes contained a forfeiture provision which declared that nonuse for five consecutive years would result in the loss of the riparian right. ^{78/} Generally, the effect of the decisions and legislative enactments of these states has been to limit the extent of riparian uses as of a given point in time, and to permit only rights obtained by prior appropriation to attach to unused or surplus water as of that date. ^{79/}

The constitutionality of statutory limitations of riparian rights was challenged in Oregon, Kansas and South Dakota as takings of property without just compensation in violation of the due process clause of the Fourteenth Amendment of the U.S. Constitution. The highest courts of

^{74/} Baeth v. Hoisveen, 157 N.W.2d 728 (N.D. 1968); see also Beck and Hurt, "The Nature and Extent of Rights in Water in North Dakota", 51 N. Dak. L. Rev. 249 (1974).

^{75/} Wash. Rev. Code Sec. 90.14.010 et seq. (Supp. 1970).

^{76/} 1967 Tex. Gen. Laws 86, ch. 45, Sec. 4.

^{77/} Id. Sec. 4(c); Wash. Rev. Code Sec. 90.14.070 (Supp. 1970).

^{78/} Wash. Rev. Code Sec. 90.14.170 (Supp. 1970).

^{79/} See also Nebraska whose early limitation of riparian rights in 1889 and 1895 was clarified in Wasserburger v. Coffee, 180 Nebr. 147, 141 N.W.2d 748 (1966); and Alaska whose 1966 statute appears to convert riparian rights to appropriative rights. Alaska Stat. 46.15.010 et seq. (1966).

all three states upheld these statutes as valid exercises of the police power. ^{80/} Regulation of water rights for the public welfare was broadly viewed in Baumann v. Smrha:

The power of a state either to modify or reject the doctrine of riparian rights because unsuited to the conditions in the state and to put into force the doctrine of prior appropriation and application to beneficial use or of unreasonable use has long been settled by the adjudicated cases. ^{81/}

These Oregon, Kansas, and South Dakota cases have all held that "vested rights" must be protected. But they have also all held that the riparian right to future use is not such a vested right that it may not be curtailed by legislative action in the proper exercise of the police power. ^{82/}

^{80/} State ex rel. Emery v. Knapp, 167 Kan. 546, 207 P.2d 440 (1949); Williams v. City of Wichita, 190 Kan. 317, 374 P.2d 578 (1962); In re Willow Creek, 74 Or. 592, 144 P. 505 (1914); In re Hood River, 114 Or. 112, 227 P. 1065 (1924); Knight v. Grimes, 80 S.D. 517, 127 N.W.2d 708 (1964).

^{81/} 145 F. Supp. 617, 624 (1956).

^{82/} See also Calif. Ore. Power Co. v. Beaver Portland Cement Co., 73 F.2d 555 (9th Cir. 1934). In theory the riparian right is not dependent on use or nonuse. Therefore, it seems that the right to future use is no less "vested" than the right to continue an actual use. But certainly less theoretical considerations could justify the distinction: e.g., a higher legal regard for concrete, investment-backed expectations, or the equity of a used right over a dormant right. The "vested rights" approach to the determination of the limits of the police power states a legal conclusion, rather than provides a basis for legal analysis:

When it is said that the legislature ought not to deprive parties of their "vested rights," all that is meant is this: that the rights styled "vested" are sacred or inviolable, or are such as the parties ought not to be deprived of by the legislature. Like a thousand other propositions, which sound speciously to the ear, it is either purely identical and tells nothing, or begs the question in issue.

If it meant that there are no cases in which the rights of parties are not to yield to considerations of expediency, the proposition is manifestly false, and conflicts with the practice of every legislature on earth.

3 Austin, Jurisprudence 70 (1st ed. 1863), quoted in Lauer, "The Riparian Right as Property", Water Resources and the Law, *supra*, at 141.

C. Development in California

1. Lux v. Haggin

Five months prior to California's admission to the Union, the first California Legislature adopted the Act of April 13, 1850, which stated:

The common law of England, so far as it is not repugnant to or inconsistent with the constitution of the United States or the constitution or laws of the State of California, shall be the rule of decision in all the courts of this state. ^{83/}

California was the first state to recognize rights obtained by the prior appropriation of water, for mining operations in the gold fields. ^{84/}

Between 1850 and 1866, several cases recognized riparian rights also, based either on private ownership of land or on possession of public land. ^{85/}

In 1872, the Civil Code was enacted with provision for the statutory appropriation of water. ^{86/} Section 1422 of the Code provided that riparian rights were not affected. ^{87/} A public and legislative debate ensued calling for the repeal of Section 1422 and questioning the vitality of the riparian rights doctrine. ^{88/}

In this heated atmosphere, the case of Lux v. Haggin was heard in 1884 ^{89/} and reheard in 1886 ^{90/} by the California Supreme Court.

The litigation had begun in 1878. The case involved the rights of riparian owners and appropriators of water on the Kern River. Each

^{83/} 1850 Cal. Stats. 219.

^{84/} See Irwin v. Phillips, 5 Cal. 40 (1855).

^{85/} As between an appropriator and a possessor of riparian land on the public domain, priority of possession was held to confer the better right. Los Angeles v. Baldwin, 53 Cal. 469 (1879); St Helena Water Co. v. Forbes, 62 Cal. 182 (1882); Pope v. Kinman, 54 Cal. 3 (1879); Crandall v. Woods, 8 Cal. 136 (1857); Cave v. Crafts, 53 Cal. 135 (1878).

^{86/} Cal. Civ. Code Sections 1410-1422 (1872).

^{87/} Cal. Civ. Code Sections 1422 (1872).

^{88/} 1 S. Wiel, Water Rights in the Western States, *supra*, at 133.

^{89/} Lux v. Haggin, 4 P. 919 (1884).

^{90/} Lux v. Haggin, 69 Cal. 255, 10 P. 674 (1886).

party claimed a superior right to the use of water for irrigation of extensive agricultural holdings. In an opinion of 200 pages the California Supreme Court held that riparian rights had been recognized in California since the adoption of the common law in the Act of 1850.

The Supreme Court declared that the Act had "operated a transfer or surrender" of the state's water rights (assuming the State had any) to riparian owners. ^{91/} The court found the United States to be the holder of common law water rights in non-navigable watercourses flowing through the public domain. ^{92/} When the public domain lands were transferred by federal patents to private individuals and by grants to the State, ^{93/} those transfers, according to the California Supreme Court, carried with them riparian rights. These conveyances by the United States were subject to any reserved federal water rights and to any private appropriations of water in which the United States had acquiesced under the Acts of 1866, 1870 and 1877, ^{94/} prior to the date of grant or patent. The conveyance of state land to private owners in turn carried the state's derivative riparian rights, subject to prior appropriations made under Civil Code Section 1410-1422. ^{95/} The Court proceeded to integrate this view of state and federally held riparian rights with the principle that appropriative rights accrue from use on public land

^{91/} Id. at 338.

^{92/} The court reasoned that the United States was the owner of non-navigable streams and beds either by virtue of the Treaty of Guadalupe-Hidalgo--in which Mexico ceded California and much of the West to the United States--or by the act admitting California into the Union, or by the Act of April 13, 1850, or the latter two taken together. Id. at 339.

^{93/} Federal lands were conveyed to the State primarily by the Swamp-Land Act of Sept. 28, 1850, 9 Stat. 519, ch. 84 (1850).

^{94/} 14 Stat. 253, Sec. 9 (1866); 16 Stat. 217 (1870); Desert Land Act of 1877 19 Stat 377 (1877), 43 U.S.C. Sec. 321 et seq. (1964).

^{95/} Cal. Civ. Code Sections 1410-1422 (1872).

adverse to the government's proprietary interests, and concluded that riparian rights are paramount to appropriative rights only where the riparian land was patented from the United States Government or conveyed by the State prior to the inception of the appropriative right. ^{96/}

2. Retained Common Law Characteristics

The doctrine of riparian rights, as it developed in California, retained certain basic common law characteristics. Generally, they are the necessity of contiguity to a defined body of water, limitation to use within the watershed, the right to make use only of natural flows, no loss of right by nonuse, and the right of temporary storage.

The riparian right can be exercised on land which abuts a stream, lake, or pond, ^{97/} or on land which overlies an underground stream ^{98/} or the subsurface flow of a surface stream. ^{99/} Generally, there is no riparian right in land washed by diffused surface water or swamps. ^{100/} Frontage on the watercourse is essential, although the extent of frontage is immaterial to the right of use. ^{101/}

Riparian rights must be exercised on riparian land within the watershed of the stream. The watershed limitation is based on the principle that unconsumed water be returned to the stream for the benefit of lower riparian owners. ^{102/} Naturally, what is the "watershed"

^{96/} Lux v. Haggin at 345-74.

^{97/} Craig, "California Water Law in Perspective", Cal. Water Code LXIX (West 1971).

^{98/} Prather v. Hoberg, 24 Cal.2d 549, 150 P.2d 405 (1944).

^{99/} Rancho Santa Margarita v. Vail, 11 Cal.2d 501, 555, 81 P.2d 533 (1938).

^{100/} See W. Hutchins, The California Law of Water Rights, *supra*, at 210.

^{101/} *Id.* at 528. See W. Hutchins, The California Law of Water Rights, *supra*, at 196-204, 209-18, 247-56, for physiographic characteristics re: kind of body of water, question of appurtenancy, etc.

^{102/} Anaheim Union Water Co. v. Fuller, 150 Cal. 327, 330, 88 P. 978 (1907); Bathgate v. Irvine, 126 Cal. 135, 142, 58 P. 442 (1889); cf. Half Moon Bay Land Co. v. Cowell, 173 Cal. 543, 547-48, 160 P. 675 (1916).

depends on the location of downstream riparian owners. Where an upstream riparian proprietor takes water from one tributary to use on land which drains into another tributary, a downstream riparian owner located on the tributary from which water is taken and above the confluence of the two tributaries has a cause of action based on violation of the watershed limitation. The downstream riparian would have no cause of action, however, if he were located below the confluence, because the return flow would reach him from either branch. ^{103/}

The concept of the riparian right as jure naturae (i.e., bestowed by the bounty of nature) is that riparian rights are limited to the use of only the waters which naturally wash the riparian property. ^{104/} Consequently, there is no riparian right to use foreign or imported water ^{105/} or the return flow of foreign or imported water. ^{106/} Nor may the riparian go above his property to divert water which would not otherwise naturally reach his riparian land. ^{107/} If water would naturally reach riparian land, then the riparian owner may divert above his upper boundary if the diversion does not entail waste, ^{108/} and if it is made without injury to the intervening riparian owners. ^{109/} Similarly, surplus water must be returned to the stream at a point

^{103/} Holmes v. Nay, 186 Cal. 231, 240-41, 199 P. 325 (1921); Crane v. Stevinson, 5 Cal.2d 387, 399-400, 54 P.2d 1100 (1936); Rancho Santa Margarita v. Vail, 11 Cal.2d 501, 81 P.2d 533 (1938).

^{104/} Turner v. The James Canal Co., 155 Cal. 82, 88, 99 P. 520 (1909).

^{105/} Stevinson W. Dist. v. Roduner, 36 Cal.2d 264, 270, 223 P.2d 209 (1950); Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 90 P.2d 58 (1939).

^{106/} Bloss v. Rahilly, 16 Cal.2d 70, 104 P.2d 1049 (1940).

^{107/} Duckworth v. Watsonville Water & Light Co., 150 Cal. 520, 526, 89 P. 338 (1907); Drake v. Tucker, 43 Cal.2d 53, 58, 184 P. 502 (1919).

^{108/} Turner at 92; Holmes at 240.

^{109/} Pabst v. Finmand, 190 Cal. 124, 137-38, 211 P. 11 (1922).

above the lands of lower riparians, ^{110/} or above the riparian user's lower boundary if the parties are opposite riparian owners. ^{111/}

The courts in California have consistently held that the riparian right is part and parcel of the land and not a mere easement or appurtenance and thus cannot be lost by nonuse or disuse. ^{112/} Section 11 of the Water Commission Act of 1913 included a provision for the forfeiture of riparian rights for ten consecutive years of nonuse, ^{113/} but that section was declared unconstitutional in 1935 by the California Supreme Court in Tulare Irrigation District v. Lindsay-Strathmore Irrigation District. ^{114/}

California has retained the common law principle that water may be temporarily stored for purposes of power generation and the propulsion of mill machinery. ^{115/} California also retained the rule that a

^{110/} Bathgate v. Irvine, 126 Cal. 135, 144, 58 P. 442 (1899).

^{111/} Joerger v. Mt. Shasta Power Corp., 214 Cal. 630, 636, 7 P.2d 706 (1932); Crum v. Mt. Shasta Power Corp., 220 Cal. 295, 307, 30 P.2d 30 (1934).

^{112/} Peake v. Harris, 48 Cal. App. 363, 192 P. 310 (1920).

^{113/} The Section provided in pertinent part:

[I]f any portion of the waters of any stream shall not be put to a useful or beneficial purpose to or upon lands riparian to such streams for any continuous period of ten consecutive years after the passage of this act, such non-applications shall be deemed to be a conclusive presumption that the use of such portions of the waters of such stream is not needed upon said riparian land for any useful or beneficial purpose; and such portion of the waters of any stream so non-applied, unless otherwise appropriated for a useful and beneficial purpose, is hereby declared to be in the use of the State and subject to appropriation in accordance with the provisions of this act.

1913 Cal. Stats. 1012.

^{114/} Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist., 3 Cal.2d 489, 530-31, 45 P.2d 972 (1935). See discussion in Sec. III, C, 2, *infra*.

^{115/} See e.g., Dunlap v. Carolina Power and Light Co., 212 N.C. 814, 195 S.E. 43 (1938); Apfelbacher v. State, 167 Wis. 233, 167 N.W. 244 (1918); 7 Clark, Waters and Water Rights, 197 (1976); Herminghaus v. Southern California Edison, 200 Cal. 81, 111, 252 P. 607 (1926).

riparian may not "considerably postpone" the flow of water, ^{116/} as for cyclic, seasonal, or "non-regulatory" storage. ^{117/}

3. Limitation of the Common Law Right in California

California has limited the scope of the Common Law riparian doctrine in several ways. Some of the limitations have been in response to the fact that California riparian rights have had to develop as part of a dual system, in conjunction with the prior appropriation system.

a. "Source of Title" Doctrine in California

A majority of common law jurisdictions hold that riparian rights attach to and may be used on all land held by the present owner which constitutes a single contiguous tract which abuts a stream. In those jurisdictions, therefore, non-riparian land may acquire riparian status if conveyed to the owner of riparian land and if it is contiguous with the owner's riparian land. ^{118/} In California riparian land is defined as the smallest parcel held under one title in the chain of title leading to the present owner. This is known as the "source of title" rule. ^{119/} An important result follows from this limitation: The

^{116/} Hass v. McManus, 161 Mich. 371, 376, 126 N.W. 462 (1910).

^{117/} Colorado Power Co. v. Pacific Gas and Electric Co., 218 Cal. 559, 24 P.2d 495 (1933); See discussion in Sec. III, A, 2, b(4) and c, *infra*. In California, prolonged retention of water is considered an appropriation of water, for which a permit must be obtained. 23 Cal. Admin. Code Section 685(d), wherein such retention or "storage" is distinguished from temporary retention or "regulation", provides:

If a tank or reservoir is filled in whole or in part more than once during a single water year, water held for less than 30 days shall be considered regulation and water held for 30 days or more shall be considered storage....

^{118/} 1 S. Wiel, Water Rights in the Western States, *supra*, at 839, 841:

^{119/} It is known as the "Unity of Title" theory.
Hudson v. West, 47 Cal.2d 823, 306 P.2d 807 (1957).

riparian tract may never become bigger than the original patent size; but it may become smaller, for example, by the severance of riparian rights from back parcels when a riparian tract is subdivided. Thus non-riparian land can never acquire riparian status.

b. Coexistence With Appropriative Rights

A significant limitation of the riparian right in California, not found in the common law, is that a riparian right may be inferior to an appropriative right. This depends on the dates of inception of the respective rights. ^{120/}

c. The 1928 Amendment

In common law riparian rights jurisdictions, non-riparian use is often a trespass which may be enjoined regardless of the reasonableness of the use. The 1928 Constitutional Amendment limited the riparian owner to reasonable beneficial uses even as against junior appropriators. ^{121/} An appropriator inferior in right has the right to use the surplus flow in excess of the reasonable beneficial needs of the riparian owner. The riparian may no longer waste water by commanding without need the full natural flow of a stream as against an appropriator or indulge in wasteful or unreasonable uses, methods of use, or methods of diversion of water. In addition, the riparian owner may be required to accept a court-imposed physical solution by which his reasonable beneficial needs are artificially supplied, and he may be required to incur reasonable expenses to accommodate the physical solution. ^{122/}

^{120/} See Section III, B, 1, *infra*.

^{121/} Peabody v. Vallejo, 2 Cal.2d 351, 40 P.2d 486 (1935); Gin s. Chow v. Santa Barbara, 217 Cal. 673, 22 P.2d 5 (1933); Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist., 3 Cal.2d 489, 45 P.2d 972 (1935).

^{122/} Rancho Santa Margarita v. Vail, 11 Cal.2d 501, 563, 81 P.2d 533 (1938); Peabody at 376.

d. Quantification of Riparian Rights Under the 1928 Amendment

The application of the 1928 Amendment often requires that a superior riparian right be quantified in order to ascertain whether surplus water is available for appropriation. ^{123/} While the burden of showing a surplus is on the later appropriator, the riparian owner must first prove the quantity of water required for present reasonable beneficial use. ^{124/}

e. Statutory Adjudications

The common law riparian doctrine has been further limited in California when riparian rights are determined in a statutory adjudication. This procedure permits the adjudication of all or part of the water rights in a stream system, upon petition by a water right claimant on the stream. ^{125/} It includes a broad administrative power, with court approval, to determine all water rights. It was designed to remedy the need for costly and time consuming suits between individual water rights claimants. These private suits tend not to be comprehensive and do not determine the rights of claimants not party to the suit. In

^{123/} Tulare at 525.

^{124/} Id. at 535. Under the common law, riparian rights were quantified in disputes between riparians, where required to give an estoppel effect to the main issue in dispute or to inform the parties of their duties under an injunction; in disputes between riparians and appropriators of inferior right, they were never quantified. Gonzales v. Arbelbide, 155 Cal. App.2d 721, 318 P.2d 746 (1957); Rogers v. Oberacker, 4 Cal. App. 333, 87 P. 1107 (1906).

^{125/} See Cal. Water Code, Section 2500 et seq. (West 1971 & Supp. 1977); Upon petition by a claimant, the Board must find that the public interest and necessity will be served thereby.

addition, the State is not directly involved, so that the public's rights and interests may not be adequately protected. ^{126/}

Riparian rights were included in the original statutory adjudication procedure in the Water Commission Act of 1913. ^{127/} The procedure was amended in 1917 to exclude riparian rights. ^{128/} It became apparent, however, that adjudications of only appropriative water rights made it impossible to ascertain finally water rights on a stream in a comprehensive manner. ^{129/} In 1935, the statutory adjudication procedure was again amended, and its scope expanded to include again riparian rights. ^{130/}

The decree issuing from a statutory adjudication employs several levels of priorities. Assignment of a right to a particular level depends upon whether the use is active or inactive and upon the type of use. Appropriators may be given higher priorities than riparians, where the riparian rights were otherwise superior to the appropriative

^{126/} It would be a distinctly advanced and very advantageous condition if there were given to the Water Commission, representing the public generally and every water claimant in particular, the authority to examine into and declare, subject to appeal to the courts, the rights of the claimants on the streams of this state to the use of the water belonging to the public.

California Conservation Commission, Report 25-26 (1913).

^{127/} Water Commission Act, ch. 586, 324, 1913 Cal. Stats. 1012.

^{128/} Ch. 153, 1917 Cal. Stats. 231.

^{129/} Correspondence in the files of the California State Water Resources Control Board indicates that water problems in the Sierra Valley, for example, from 1929 to 1934, could not be solved adequately because riparian rights were not included in the adjudication process.

^{130/} Ch. 647, 1935 Cal. Stats. 1795.

rights. ^{131/} In effect, the statutory adjudication process has created the "decreed right" as another type of California water right. Unexercised ("dormant") riparian rights are also quantified in statutory adjudications. Again, quantification is contrary to the general common law rule that riparian uses, being correlative and depending on other riparian uses at a given time, are not quantifiable. ^{132/} These practices, limiting the riparian right, are currently under review in the First and Third District Courts of Appeal. ^{133/}

4. Recent Developments Under the 1928 Amendment

The 1928 Constitutional Amendment limits riparian rights to reasonable beneficial uses, to protect the public interest in the conservation and efficient utilization of the state's water resources. ^{134/} This constitutional policy has been echoed in a long line of cases that have applied the reasonable beneficial use limitation to all water rights. Recently, however, this policy has been asserted with renewed vigor. Joslin v. Marin Municipal Water District ^{135/} and People ex rel State Water Resources Control Board v. Forni ^{136/} have each had a separate, significant impact on riparian rights.

^{131/} See Chy Company v. State Water Resources Control Board, 1 Civil 41457 (1st D.C.A.) Request for Judicial Notice of Facts and Documents. Aug. 23, 1977; see Adjudications "e", "g", "k" therein, in which dormant rights were given a priority for irrigation lower than active riparian and appropriative uses; in "l", no priority was given to dormants who had entered proofs of claim; in "i", dormant riparian rights were given an equal right to irrigate based on an agreement of parties.

^{132/} Id. Adjudications "e", "g", "k", "i". See also Water Code Section 2769 (West 1971).

^{133/} See the Long Valley Creek and Soquel Creek adjudications, infra, Section III, C, 2.

^{134/} Cal. Const., art. 10, sec. 2.

^{135/} 67 Cal.2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967).

^{136/} 54 Cal. App.3d 743, 126 Cal. Rptr. 851 (1976).

Joslin ^{137/} treats public policy as playing a very large role in the determination of whether a use is reasonable and beneficial. Cases preceding Joslin tended to emphasize the view that reasonable beneficial uses were to be determined upon the facts and circumstances of the particular case. ^{138/} The California Supreme Court in Joslin shifted this emphasis and remarked:

[A]lthough, as we have said, what is a reasonable use of water depends upon the circumstances of each case, such an inquiry cannot be resolved in vacuo isolated from statewide considerations of transcendent importance. Paramount among these we see the ever-increasing need for the conservation of water in this state, an escapable reality of life quite apart from its express recognition in the 1928 amendment. ^{139/}

The Court, in Joslin, found the riparian use in question to be unreasonable. It stated:

[W]e cannot deem such a use to be in accord with the constitutional mandate that our limited water resources be put only to those beneficial uses "to the fullest extent of which they are capable", that "waste or unreasonable use" be prevented, and that conservation be exercised "in the interest of the people and for the public welfare." ^{140/}

The second recent case which has had a major impact on the riparian right, the Forni case, involved an action under Water Code Section 275. Section 275 permits the Department of Water Resources and the State Water Resources Control Board to protect the public interest in the conservation and highest use of its waters:

The Department and Board shall take all appropriate proceedings or actions before executive, legislative or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state. ^{141/}

^{137/} The Joslin case will be discussed in detail below.

^{138/} See e.g., Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist., 3 Cal.2d 489, 45 P.2d 972 (1935).

^{139/} Joslin at 140.

^{140/} Id. at 141.

^{141/} Cal. Water Code Section 275 (West 1971, Supp. 1977).

In Forni, the State Water Resources Control Board brought an action to test the reasonableness of the use of waters by riparian owners in the Napa Valley. The Court of Appeal held that the Board's allegation of an unreasonable method of diversion of water stated a cause of action against riparian owners under Section 275. ^{142/} The Board sought to enjoin direct diversions, during periods of high water demand, by Napa River riparians for the purpose of spraying their grapevines to prevent frost damage. The Board alleged that such diversions would deplete the water supply and deprive many vineyardists of water needed for frost protection and were thus unreasonable, although impoundment of winter flows prior to the frost season for later frost protection use would be reasonable. The significance of actions under Water Code Section 275 is that the state's interest in the conservation and efficient utilization of water need not await vindication in a perhaps narrowly drawn lawsuit brought by private parties, but may be asserted upon the initiative of public agencies.

^{142/} Forni at 754.

III. Exercise of the Riparian Right

A. Between Riparian Owners

1. Correlative Rights

The two fundamental aspects of riparianism in California as a water resource allocation system are "correlative rights" and "reasonable use." The right of a riparian to apply a given quantity of water to a particular use on his land is measured and limited by the equal rights of the other riparian owners along the stream. ^{143/} Thus, the right is not absolute or exclusive but mutual and correlative. ^{144/} As opposed to the prior appropriation system, where scarce water may be allocated to senior appropriators to the complete exclusion of junior rights holders, ^{145/} in the riparian system shortages are shared by mutual reductions in use by all riparian owners. ^{146/}

2. Reasonable Use

The common law evolved two theories for adjusting uses among riparian owners within the system of correlative rights: "natural flow" and "reasonable use." ^{147/} Under the natural flow theory, each riparian owner was entitled to receive essentially the entire natural flow of the stream upon his land and was obligated to permit that flow to pass substantially undiminished to the next riparian owner downstream. This theory permitted only

^{143/} Pabst v. Finmand, 190 Cal. 124, 129, 211 P. 11 (1922).

^{144/} I S. Wiel, Water Rights in the Western States, *supra*, at 793.

^{145/} See M. Archibald, Appropriative Water Rights in California (Governor's Commission to Review California Water Rights Law, Staff Paper No. 1, 1977).

^{146/} Harris v. Harrison, 93 Cal. 676, 29 P. 325 (1892).

^{147/} Restatement (Second) of Torts 74-75 (Tentative Draft No. 17, 1971).

instream uses (e.g., propulsion of mill wheels) and those minimal consumptive uses (e.g., domestic needs) which did not "sensibly or materially" diminish the full flow of the stream. ^{148/}

The natural use theory has been largely abandoned in favor of the reasonable use doctrine, ^{149/} which was embraced from the outset in California. ^{150/} Under this theory, a riparian owner is entitled to receive the natural flow of the stream undiminished except for the reasonable uses made by riparian owners upstream. ^{151/} He is likewise obligated to pass the entire flow of the water which reaches him to downstream riparians undiminished except for that portion which he can reasonably use himself. ^{152/}

Samuel Wiel described the interrelation of the correlative rights and reasonable use concepts. He stated that "reasonable use" in the law of riparian rights denotes:

an equality of sharing the water's benefits for the equal correlative use of all land having natural access to it by natural situation; that is, an equality in the use of all riparian land. ^{153/}

Since it permitted abstractions of water from and diminution of flow of a watercourse limited only by the rule of reasonableness, the doctrine of reasonable use thus made the water of a stream available for a larger range of offstream uses. The reasonable use doctrine also prohibits those uses which are unreasonable. This prohibition against unreasonable use has been given constitutional dimension in the 1928 Constitutional Amendment, which expressly limits the riparian right to reasonable beneficial use. ^{154/}

^{148/} Id. at 74.

^{149/} 2 W. Hutchins, Water Rights Laws in the Nineteen Western States, *supra*, at 81.

^{150/} 1 S. Wiel, Water Rights in the Western States, *supra*, at 744-747.

^{151/} 2 W. Hutchins, Water Rights Laws in the Nineteen Western States, *supra*, at 391.

^{152/} Parker v. Swett, 188 Cal. 474, 485, 205 P. 1065 (1922).

^{153/} 1 S. Wiel, Water Rights in the Western States, *supra*, at 866.

^{154/} Cal. Const. art. 10, sec. 2.

The term "reasonable use" is often used ambiguously. It generally comprehends not only the reasonableness of the purpose to which water is applied, but also the reasonableness of the method of use and of the means of diversion. Under the common law it also includes the prohibition of "unreasonable waste." ^{155/} The 1928 Constitutional Amendment states disjunctively that there is no riparian right to waste or to unreasonable use or to unreasonable method of use or to unreasonable method of diversion of water. ^{156/}

The reasonableness of any particular riparian use -- given the equal or correlative right of all riparians to the use of a common supply -- can be determined in the first instance only by reference to the reasonable wants and needs of the other riparian proprietors along the stream. ^{157/} It is a relative concept. ^{158/}

If a new or increased upstream use is found to be reasonable, then harm to existing lower uses must be born by those users without complaint. ^{159/} But, the extent of such harm is itself a factor in the reasonableness equation; if the harm caused by the new use is great, the use may therefore be unreasonable. ^{160/} Under the reasonable use doctrine, the amount of damage that will be allowed before a "legal injury" is found to occur has

^{155/} Turner v. The James Canal Co., 155 Cal. 82, 93, 99 P. 520 (1909).

^{156/} Cal. Const. art. 10, sec. 2.

^{157/} Pabst v. Finmand, 190 Cal. 124, 129, 211 P.11 (1922).

^{158/} Turner at 95; W. Hutchins, The California Law of Water Rights, *supra*, at 222; S. Wiel, "The Pending Water Amendment to the California Constitution, and Possible Legislation," 16 Calif. L. Rev. 169, 197, 277 n. 116 (1927-28).

^{159/} In this paper the term "injury" will refer to the invasion of a legal right; "harm" and "damage" will refer to detriment or loss actually suffered; "damages" will refer to the legal remedy of pecuniary indemnity.

^{160/} "In a reasonable use of one's own land, the damage to the other is *damnum absque injuria*, but in excess, the damage is wrongful." 1 S. Wiel, Water Rights in the Western States, *supra*, at 793.

been said to be less damage than would constitute a nuisance under the maxim sic utere. ^{161/} Thus, in Holmes v. Nay the court noted without deciding that:

[I]t may be that where the question is one of a reasonable manner of use as between an upper and a lower riparian owner, a manner of use which perhaps does not violate the principle of the maxim [sic utere] as between strangers, would yet be unreasonable as between those occupying the relation to each other of riparian owners on the same stream. ^{162/}

^{161/} Sic utere tuo ut alienum non laedas, meaning that one may use his property only to the extent that he causes no injury to other property, is the maxim applied in nuisance theory. A nuisance is a use of property which substantially and unreasonably interferes with the use and enjoyment of the property of another. "An intentional invasion of another's interest in the use and enjoyment of land is unreasonable ... unless the utility of the actor's conduct outweighs the gravity of the harm." Restatement (Second) of Torts, Sec. 826 (Tentative Draft No. 16, 1970). See note ^{162/}, infra.

^{162/} Holmes v. Nay, 186 Cal. 231, 241, 199 P. 325 (1921).
The rule of reasonableness came to be applied in two quite different senses. The courts lumped together two distinct torts under the heading of riparian rights The distinction between the two types of cases has not often been made explicit. In both situations the courts have purported to apply the same rule of reasonable use, but the application of the rule has been different in each, and the distinction can be found in the results. In the water quality cases, reasonableness depends upon a balancing of the interests of the plaintiff and the defendant in each case, in a manner identical to the process used in the law of nuisance. Indeed in many water pollution cases the courts have employed the nuisance formula. In some cases, therefore, a defendant's pollution has been held to be justified because the utility of the defendant's conduct outweighs the gravity of the harm imposed upon the plaintiffs. In the water quantity cases, the rule of reasonableness is applied quite differently. Each use is required to be beneficial [sic], suitable to the watercourse, and to have economic and social value. If these requirements are met, reasonableness may require each riparian to put up with minor inconveniences and to adjust the quantity of water used or the method of its use so that both uses can coexist. If they cannot be reconciled in this fashion, because the interference is caused by the defendant taking the substance of the water from the plaintiff and using it himself, resolution of the conflict involves consideration of the reciprocal factors of whether the first user's investments and other values are entitled to protection and whether the new user ought to compensate the former user for the loss of that which the later user has gained. In most of the cases in which the later user has suffered substantial harm through his

The California decisions embody two distinct approaches to the determination of reasonable use among riparians, both under the common law and under Article 10, Section 2. On the one hand, the decisions have regarded reasonableness purely as a question of fact resting upon a case-by-case determination, considering the various circumstances of the particular parties involved. On the other hand, the courts have treated reasonableness with per se-type rules, where the factual inquiry is not so much whether a use is factually reasonable as whether the purpose of the use fits into certain categories of "preferred", or "proper", or "improper" uses. The "case-by-case" and "per se" approaches are often intertwined in individual cases and in the more than 90 years since Lux v. Haggin have generally not been analyzed as being distinct and separate.

a. The Case-by-Case Approach

Courts in California have repeatedly declared that "In the apportionment of water among riparian owners, the amount reasonably needed by one owner is a question of fact to be determined on the circumstances of the particular case." ^{163/} In Southern California Investment Company v. Wilshire, ^{164/} citing Harris v. Harrison, ^{165/} the court stated that the factors to be considered in determining the reasonableness of a use between riparians include, among others, the length of the stream, the volume of the water in the stream, the extent of ownership along the banks, the character of the soil, the area sought to be irrigated, and the relative value of the uses.

water supply for a reasonable use being taken, the decision has been that the taking is unreasonable.

Restatement (Second) of Torts, 76-77, emphasis added, (Tentative Draft No. 17, 1971).

^{163/} Deetz v. Carter, 232 Cal. App.2d 851, 856, 43 Cal. Rptr. 321 (1965); see Carlsbad Mutual Water Co. v. San Luis Rey Development Co., 78 Cal. App.2d 900, 178 P.2d 844 (1947).

^{164/} 144 Cal. 68, 71, 77 P. 767 (1904).

^{165/} Harris v. Harrison, 93 Cal. 676, 29 P. 325 (1892).

In Herminghaus v. Southern California Edison ^{166/} the court was confronted with Section 42 of the 1913 Water Commission Act, which stated that no more than two and one-half acre-feet of water per acre could be beneficially applied to uncultivated land. The court held that the amount of water used on an acre of land is a question for the courts to determine rather than a question for the Legislature. The court declared that beneficial or "useful and beneficial purposes" depend upon the circumstances of each particular case, such as: location of the land, aridity, rainfall, soil porosity, and adaptability to particular forms of production. The court in Half-Moon Bay Land Company v. Cowell ^{167/} declared "profitable irrigation" also to be a factor. The Restatement (Second) of Torts, Tentative Draft No. 17 presents a list of factors to be considered in a case-by-case determination, ^{168/}

^{166/} 200 Cal. 81, 252 P. 607 (1926).

^{167/} 173 Cal. 543, 160 P. 675 (1916).

^{168/} Sec. 850 B Determination of Reasonableness

The determination of the reasonableness of a use of water depends upon a consideration of the interests of the riparian proprietor making the use, of any riparian proprietor harmed by it and of society. Factors which affect the determination include the following:

- (a) The purpose of the respective uses,
- (b) the suitability of the uses to the watercourse or lake,
- (c) the economic value of the uses,
- (d) the social value of the uses,
- (e) the extent and amount of the harm caused,
- (f) the practicality of avoiding the harm by adjusting the use or method of use of one proprietor or the other,
- (g) the practicality of adjusting the quantity of water used by each proprietor,
- (h) the protection of existing values of land, investments, and enterprises,
- (i) the burden of requiring the user causing the harm to bear the loss.

Restatement (Second) of Torts, Sec. 850 B (Tentative Draft No. 17, 1971).

which reflect the statement in Joerger v. Mount Shasta Power Company ^{169/}
that the determination of reasonable use should be made in accordance with
"principles of equity." ^{170/}

The courts, in following the case-by-case approach, generally have not
considered the purpose for which water is used to be determinative of whether
a use is reasonable. In Mentone Irrigation Co. v. Redlands Electric Light
and Power Co. the court said:

The riparian owner ... has a right to make any use beneficial
to himself on the riparian land ... except that if the use in-
volves consumption of water, he may not use more than is a
reasonable share as compared with other riparian owners....^{171/}

This approach is in accord with that taken by the Restatement (Second) of
Torts, Tentative Draft No. 17, which indicates that the purpose of the
riparian use is but one factor to be considered in the total question of
reasonableness. ^{172/}

^{169/} 214 Cal. 630, 7 P.2d 706 (1930).

^{170/} Beuscher, in "Appropriation Water Law Elements in Riparian Doctrine
States", 10 Buffalo L. Rev. 448 (1961) considers that prior riparian
users have been accorded far greater protection than that which would
be supposed in light of the theory of correlative rights. The Restate-
ment (Second) of Torts Tentative Draft No. 17 includes the protection
of existing values as a factor in the determination of reasonableness.
In the Comment at p. 117, the drafters state: "Whether or not naked
priority is material, protection of such investments, enterprises, and
land values of the prior users seems to be a very important factor
in determining reasonableness." While temporal priority has been ex-
pressly disclaimed in California, no study of the cases has been done
to test the application of the Beuscher-Restatement thesis in California.

^{171/} 155 Cal. 323, 327, 100 P.1082 (1909).

^{172/} Restatement (Second) of Torts, Sec. 850 B(a), (c), (d) (Tentative Draft
No. 17, 1971).

This approach has also been taken by courts which have interpreted the 1928 Constitutional Amendment. It largely appears in cases between riparians and appropriators, ^{173/} but it was expressly recognized in Rancho Santa Margarita v. Vail ^{174/} in a dispute among riparians in which the court held that reasonable beneficial use under the 1928 Amendment is a question of fact that must be passed upon in each case.

b. The Per Se Approach

The second approach that the courts have used has involved the use of per se-type rules. These rules entail threshold inquiries: if a certain purpose or use is found to be per se reasonable or unreasonable, that finding precludes further inquiry into the reasonableness of the use.

Under the case-by-case approach, the court analyzes and weighs a wide variety of factors, and considers the reciprocal effects of each riparian's use on the other. ^{175/} Under the per se approach, the court limits its inquiry to the type of use being made. If that type of use falls within a category of "preferred" uses, then the riparian is entitled to the use of

^{173/} See Tulare Irrigation District v. Lindsay-Strathmore Irrigation District, 3 Cal.2d 489, 45 P.2d 972 (1935); Meridian v. San Francisco, 13 Cal.2d 424, 90 P.2d 537 (1939); Peabody v. Vallejo, 2 Cal.2d 351, 40 P.2d 486 (1935).

^{174/} 11 Cal.2d 501, 81 P.2d 533 (1938).

^{175/} No one thing will determine how much water a riparian owner is entitled to take as against other riparian owners; it depends upon the whole evidence, and he is entitled to offer in evidence all pertinent facts which will enable the jury to conclude whether his use is reasonable or not. . . . The necessity of one proprietor, however pressing, is not the sole measure, though he took no more than necessary for his use; it must be in comparison with the necessities of the other owners.

2 S. Wiel, Water Rights in the Western States, supra, at 804. "Nor is the question of reasonableness to be tested solely by the needs of the upper riparian proprietor." Pabst v. Finmand, 190 Cal. 124, 129, 211 P.11 (1922).

water to the complete exclusion of all other types of uses. The preferred use is "reasonable" per se. If the use falls within a category of "improper" or "non-riparian" uses, then it is entitled to no water, regardless of other factors or equities weighing in its favor. It is "unreasonable" per se. If the use is considered a "proper" riparian use, then and only then will the court continue with a weighing of all the facts and all the circumstances of the parties, including the mutual allocation of loss.

1) Preferences: Reasonable Per Se

In several decisions California courts have accorded a preference to "natural" or "domestic" uses, which include drinking water, watering of domestic herds, and household needs. ^{176/} These preferred uses were recognized in the common law. ^{177/} In Prather v. Hoberg, the court recognized a larger scale of domestic use when it accorded a preference to some aspects of a commercial resort use. ^{178/}

A riparian may take all the water he reasonably needs for domestic purposes regardless of the effect on other riparians on the stream. ^{179/}
A riparian's domestic use may lawfully harm or even destroy competing

^{176/} Lux v. Haggin, 69 Cal. 255, 407, 10 P. 674 (1886); Drake v. Tucker, 43 Cal. App. 53, 56, 184 P. 502 (1919).

^{177/} These preferences came from the common law "natural flow" theory which distinguished between natural and artificial uses. Restatement (Second) of Torts, Comment at 75 (Tentative Draft No. 17, 1971).

^{178/} 24 Cal.2d 549, 150 P.2d 405 (1944).

^{179/} Lux v. Haggin, 69 Cal. 255, 407, 10 P. 674 (1886).

non-domestic uses, such as irrigation uses. Thus, a domestic use, entitled as a matter of absolute and not correlative right, is reasonable per se. ^{180/}

2) Non-Riparian Uses, Not on Riparian Tract or Not Within Watershed: Unreasonable Per Se

At the opposite end of the reasonableness spectrum are uses made on non-riparian land or outside the watershed. California's view is that these uses, if harmful, are enjoined regardless of their reasonableness under the circumstances. ^{181/} There is no apportionment because such non-riparian use is per se unreasonable.

These examples of unreasonable uses may appear simply to be outside the definition of the riparian right, and one might argue that reasonableness ought not to be considered because these uses are not riparian in the first place. Wiel asserts, however, that the watershed limitation is not an inherent part of the riparian right, but has been historically superimposed on the riparian right concept as a question of reasonableness of use to

^{180/} What is reasonable must be determined by the precise conditions under which a use is made; and therefore a use of water reasonable at one time and place may well be wholly unreasonable at another. The only consistent exception to this rule has been the preferred position accorded domestic use; it can be explained either that domestic use of water is per se always reasonable, or that the use of water for human need transcends the reasonable use requirement. Lauer, "The Riparian Right as Property: in Water Resources and the Law 133, 163 (1958). Lauer's last point, that domestic uses may be beyond the test of reasonableness, has been reflected from time to time in the California case law. See, e.g., Duckworth v. Watsonville Water and Light Co., 150 Cal. 520, 526, 89 P. 338 (1907). Whichever of Lauer's explanations is the more suitable is academic: the result in both cases is to foreclose inquiry into the actual reasonableness of the use under the circumstances of the particular case.

^{181/} Boehmer v. Big Rock Irrigation District, 117 Cal. 19, 48 P. 908 (1897); Bathgate v. Irvine, 126 Cal. 135, 58 P. 442 (1899).

insure that surplus water would be returned to the stream. ^{182/} While the California view is embraced by a majority of American jurisdictions, a minority of jurisdictions treat use by a riparian owner out of the watershed as only a factor to be considered in determining reasonableness, and those jurisdictions have held that such use may be reasonable. ^{183/}

California courts similarly hold that use on non-riparian land within the watershed is unreasonable per se: no further factual inquiries are conducted upon determining that the harmful uses are being made on non-riparian land. ^{184/} California's "source of title" doctrine increases the impact of this per se treatment. The argument can also be made that such use is outside the definition of the riparian right and is not a question of reasonableness at all. ^{185/} Other jurisdictions have considered non-riparian use by a riparian to be a factor in the factual determination of reasonable use and not unreasonable per se. ^{186/}

^{182/} 1 S. Wiel, Water Rights in the Western States, *supra*, at 849. See also Pabst v. Finmand, 190 Cal. 124, 130, 211 P. 11 (1922), for the proposition that the watershed limitation is not properly part of the definition of "riparian land", but is a question of proper riparian use; and Lauer, "The Riparian Right as Property" in Water Resources and the Law, *supra*, at 163-164, who states that the riparian right had been recognized for 50 years before the watershed limitation appeared.

^{183/} Jones v. Conn, 39 Or. 30, 64 P. 855, 65 P. 1068 (1901).

^{184/} Gould v. Stafford 77 Cal. 66, 68, 18 P. 879 (1888).

^{185/} If access to the stream is the basis of the right, then once access is lawfully obtained, any limitation on the place of use can only follow as a question of the reasonableness of the use. See 1 S. Wiel, Water Rights in the Western States, *supra*, at 840.

^{186/} See cases cited in Trelease, Water Law, 2d. ed., 1974, p. 256 from Massachusetts, Kansas, North Carolina, Vermont, New Hampshire, Texas, and Oklahoma; see also Restatement (Second) of Torts, Sec. 855 and Comment (Tentative Draft No. 17, 1971) which follows this view.

3) Non-Riparian Uses on Riparian Land: Unreasonable Per Se

Non-riparian uses on riparian land have been considered to be "improper" or unreasonable per se riparian uses, not because of the location of use but because of the nature of the use itself. Such non-riparian uses include seasonal or periodic storage for power generation, ^{187/} personal aesthetic enjoyment, ^{188/} and delivery of sand and gravel. ^{189/}

In Seneca Consolidated Gold Mines v. Great Western Power Co., the riparian owner had impounded water on his riparian land to generate electricity. The court likened the resulting "unnatural" flow to use outside the watershed, and held that such use was in the nature of an appropriation. The court held the use "conclusively presumed to be injurious." ^{190/} Earlier, in Herminghaus v. Southern California Edison, the court had also sustained the finding that prolonged storage for a power generation use was "unreasonable per se." ^{191/}

4) Proper Riparian Uses: Not Unreasonable Per Se

"Proper" purpose is a threshold inquiry. If a use is found to be a "proper" riparian use, continuing factual analysis of reasonableness must be made. Given that "proper" riparian use is a threshold requirement,

^{187/} Herminghaus v. Southern California Edison Co., 200 Cal. 81, 252 P. 607 (1926); Moore v. California Oregon Power Co., 22 Cal.2d 725, 140 P.2d 798 (1943); Seneca Consolidated Gold Mines Co. v. Great Western Power Co., 209 Cal. 206, 287 P. 93 (1930).

^{188/} Modoc Land and Live Stock Co. v. Booth, 102 Cal. 151, 36 P. 431 (1894); Rose v. Mesmer, 142 Cal. 322, 75 P. 904 (1904); Los Angeles v. Aitken, 10 Cal. App.2d 460, 52 P.2d 585 (1935).

^{189/} Joslin v. Marin Municipal Water District, 67 Cal.2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967).

^{190/} Seneca Consolidated Gold Mines Co. v. Great Western Power Co., 209 Cal. 206, 219, 287 P. 93 (1930).

^{191/} Herminghaus v. Southern California Edison Co., 200 Cal. 81, 110, 252 P. 607 (1926).

"proper" uses are reasonable per se in that a determination is made that such a use "is not always and everywhere unreasonable." ^{192/}

In U. S. v. Fallbrook Public Utility District the district urged that the use of water on riparian land for military purposes was akin to city water use and was, therefore, not a "proper" riparian use. ^{193/} The district court declared that while reasonable use was a question of fact, it rejected the idea that military use is not per se a reasonable riparian use. ^{194/} In addition to military uses, courts in California have found such uses as domestic uses, certain commercial domestic uses, irrigation, and temporary storage for energy purposes to be proper riparian uses. ^{195/}

c. Interplay of the Case-by-Case and Per Se Approaches

Some courts in other states have rejected the idea that use outside of the watershed and use on non-riparian land are per se unreasonable. Other courts have flatly rejected the per se approach. In so doing, a Nebraska court leveled the following criticism:

The purpose of the law is to secure equality in the use of water by riparian owners as near as may be by requiring each to exercise his right reasonably and with due regard to the right of other riparian owners to apply the water to the same or to other purposes. This purpose is not subserved by any arbitrary classification. ^{196/}

^{192/} 17 Columbia L. Rev. 383, 392 n. 61 (1917).

^{193/} 108 F. Supp. 72 (1952). This opinion was rendered upon a pre-trial request by the parties to argue and determine issues of law in advance, so as to simplify and shorten the trial. The partial judgment rendered thereafter, in 110 F. Supp. 767 (1953), was reversed by the U. S. Court of Appeal, in 235 F.2d 647 (9th Cir. 1956).

^{194/} Id. at 82.

^{195/} Lux v. Haggin, 69 Cal. 255, 10 P. 674 (1886); Prather v. Hoberg, 24 Cal.2d 549, 150 P.2d 405 (1944); Bathgate v. Irvine, 126 Cal. 135, 211 P. 11 (1922); Mentone Irrigation Co. v. Redlands Electric Light and Power Co., 155 Cal. 323, 100 P. 1082 (1909).

^{196/} Meng v. Coffee, 67 Nebr. 500, 93 N.W. 713 (1903).

In 1911, Wiel perceived a trend in California away from a per se approach toward a complete case-by-case approach:

[I]t is coming now to be regarded that the distinction [between natural and artificial uses] is a rule as to what is reasonable not alone in purpose ... but also in its degree of damage ... for the support of life it will usually be found reasonable to disregard the degree of damage and to take the whole stream, but it is coming to be regarded as not a hard and fast rule if the facts of each case do not bear it out. 197/

Earlier, in Lux v. Haggin, the court had examined in elaborate dicta the two approaches in the common law. The court in Lux favored a case-by-case determination over hard and fast rules:

The distinction between natural and artificial "wants" would be under supposable conditions somewhat fanciful. The urgent and pressing necessity of a particular use as distinguished from another may itself depend on the circumstances. 198/

The California cases since Lux have generally not recognized that they are using two distinct approaches. In Prather v. Hoberg the court considered the question of whether water used for resort purposes for paying guests was a domestic use which should be accorded a preference under the common law system. The court initially suggested that one should look to the precise uses to which the water was put, such as swimming pools, ornamental pools, boating and bathing, to decide the extent of "domestic" use in a commercial resort. The court affirmed that the basis of an apportionment is "the present reasonable beneficial uses to which the water may be properly put by the riparian owners, consideration being given, of course, to preferential uses." 199/ The court then stated, however, that reasonable use is in the first instance a question for the trier of fact and must be consistent with the corresponding right of enjoyment of other riparians. 200/

197/ 1 S. Wiel, Water Rights in the Western States, *supra*, at 800.

198/ Lux v. Haggin, 69 Cal. 255, 408, 10 P. 674 (1886).

199/ Prather v. Hoberg, 24 Cal.2d 549, 561, 150 P.2d 405 (1944), *emphasis added*.

200/ Id. at 562.

In Cowell v. Armstrong a downstream riparian plaintiff claimed that his use of water for cattle watering was a preferred use over the use of the upstream defendant for irrigation. The court confirmed a preference for "natural wants" over "extraordinary or artificial wants" and noted that "some of the authorities even indicate that in hot and arid regions water for irrigation may ascend to the classification of a natural want as distinguished from its general classification of an artificial want or use." ^{201/} Up to this point, the court recognized the concept of preferences. But then the court, noting that the cattle in question numbered in the thousands, rejected the claimed domestic preference, stating flatly that the reasonableness of the use depended upon the circumstances of the particular instance. ^{202/}

In Gonzalez v. Arbelbide the Court of Appeal rejected the priority accorded by the trial court to the use of the water for 800 head of cattle over the use of water for irrigation. Noting no case which had accorded a preference of use for such sizable commercial herds, the court pursued a case-by-case analysis. ^{203/}

In Deetz v. Carter the court confirmed the domestic preference and stated that Water Code Section 106 ^{204/} was a statutory extension of traditional preferences to natural over artificial uses. The court held that the use of water for herds of cattle raised for profit is not a domestic

^{201/} Cowell v. Armstrong, 210 Cal. 218, 225, 290 P. 1036 (1930).

^{202/} Id. at 226.

^{203/} Gonzales v. Arbelbide, 155 Cal. App.2d, 721, 318 P.2d 746 (1957).

^{204/} Cal. Water Code Section 106:

It is hereby declared to be the established policy of this State that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation.

use, and asserted that reasonableness is a question of fact to be determined under the circumstances of the particular case. ^{205/}

U. S. v. Fallbrook Public Utility District dealt with a claimed riparian right to use water for a U. S. military reservation. The federal government claimed a domestic use preference. The public utility district and the State of California, as amicus curiae, likened the government's use to an urbanized municipal supply, which, because of use on non-riparian land, is not generally recognized in California as a proper riparian purpose, much less accorded a preference for domestic use. ^{206/} The district court rejected both propositions and held the use of water for military purposes to be a proper or "reasonable per se" riparian use. ^{207/} At the same time it asserted reasonableness to be a question of fact and, in light of the 1928 constitutional mandate, said that Prather v. Hoberg, which is discussed above, "stands as a modification of the rigid distinction between natural and artificial uses which earlier cases may have sanctioned." ^{208/}

In the Herminghaus case the court, on the one hand, disapproved of broad legislative declarations of reasonable or beneficial uses, and asserted the necessity for a case-by-case determination. But, on the other hand, it held that seasonal storage of water was not a "riparian use", sustaining the trial court's conclusion that such use was "unreasonable per se." ^{209/}

^{205/} Deetz v. Carter, 232 Cal. App.2d 851, 856, 43 Cal. Rptr. 321 (1965).

^{206/} U. S. v. Fallbrook Public Utility District, 108 F. Supp. 72, 81 (1952).

^{207/} Id. at 83.

^{208/} Id. at 80 n. 22. In the delineation of issues for retrial, in 165 F. Supp. 806 (1958), the District Court refused to commit itself, before trial, any further than to say that the reasonableness of a military use depends on the facts and circumstances of the case. See note 193, supra.

^{209/} Herminghaus v. Southern California Edison, 200 Cal. 81, 252 P. 607 (1926).

Under the per se treatment of riparian uses, "reasonable use" is a question of whether the riparian owner is entitled either to no water at all or to all the water he needs regardless of the damage he causes to other riparian owners. No adjustments or mutual accommodations are made between riparian owners which take into account the circumstances of the case.

If the 1928 Amendment is interpreted as requiring a case-by-case approach, then the common law system of preferences and other per se riparian uses may no longer be valid except, perhaps, as judicial guidelines. On the other hand, the fact that preferences and per se reasonable or unreasonable uses have been recognized in the case law may indicate that the question of reasonable beneficial uses under the 1928 Amendment is conducive to a per se approach.

Two cases shed light on these questions. In U. S. v. Fallbrook Public Utility District, the court indicated in a footnote that the 1928 Amendment has modified the "rigid" distinctions made in common law preferences. ^{210/} In Joslin v. Marin Municipal Water District, the California Supreme Court reviewed a dispute between an appropriator of water for municipal purposes and a riparian owner who relied on the flow of the stream to deliver gravel to his land for use in a valuable gravel business. The court first stated that the question of reasonableness under the 1928 Amendment rested generally upon a case-by-case determination. ^{211/} The court then proceeded in its own analysis to focus exclusively on Joslin's use of water for gravel transport, and declared the use, under the facts of the case, to be unreasonable as a matter of law. ^{212/} The opinion in Joslin, evidencing both case-by-case

^{210/} 108 F. Supp. 72, 80 n. 22.

^{211/} Joslin v. Marin Municipal Water Dist. 67 Cal.2d 132, 140, 429 P.2d 889, 60 Cal. Rptr. 377 (1967).

^{212/} Id. at 141.

and per se approaches, appears to stand for the proposition that while a case-by-case approach is recommended in many instances, a per se approach to the question of reasonable beneficial use under the amendment is appropriate in certain circumstances.

B. Between Riparian Owner and Appropriator

1. Determination of the Superior Right

Waters in California can be claimed by both riparians and appropriators. A determination of whether a riparian or an appropriator has legal priority to certain water generally depends on the dates the respective rights came into existence. It is a question of temporal priority.

a. Inception of the Appropriative Right

Before 1914, an appropriative right dated from the time water was first diverted and diligently applied to a beneficial use. ^{213/} A pre-1914 appropriation made in accordance with the 1872 Civil Code provisions "related back" to the time of posting notice of an intended appropriation, if thereafter the actual application of water to a beneficial use was diligently pursued. ^{214/} An appropriation of water after 1914 secures a priority of right as of the date of filing for a permit under Water Code Sections 1200 et seq., ^{215/} provided the requirements for a valid appropriation under the Code are met. ^{216/}

b. Inception of the Riparian Right

In the case of riparian rights attaching to land received by federal patent, those rights acquired by the patent relate back to the "inception of the right", which is the date of actual settlement with a bona fide intent

^{213/} Osgood v. El Dorado Water and Deep Gravel Mining Co., 56 Cal. 571 (1880).

^{214/} Cal. Civil Code Section 1418 (West 1954).

^{215/} Cal. Water Code Section 1200 et seq. (West 1971).

^{216/} Cal. Water Code Section 1450 (West 1971).

to acquire title by patent. ^{217/} Riparian rights held by grantees of Mexican land grants became vested upon California's admission to the Union in 1850. ^{218/}

The State of California has also been considered a riparian owner of land conveyed to it by the federal government. ^{219/} Of greatest importance are the lands conveyed under the Swamp-Land Act of 1850, ^{220/} for the purpose of swamp and marshland reclamation. Property rights, including riparian rights, relate back to September 28, 1850, when equitable title is said to have passed, regardless of when the specific lands are identified. ^{221/}

Conveyance of state lands obtained under the Swamp-Land Act by the State to private persons would as a rule carry the 1850 priority. ^{222/} However, it has been held that by the enactment of the 1872 Civil Code, the State as a riparian owner statutorily made its water subject to appropriation. ^{223/} Appropriation made in accordance with the Code on waters running through state lands are paramount in right to the riparian rights of later grantees of those state lands. ^{224/}

^{217/} Pabst v. Finmand, 190 Cal. 124, 131, 211 P. 11 (1922). Older cases had considered either the date of patent itself or the date of filing for patent to mark the inception of the riparian right as against appropriative claims Osgood v. El Dorado Water and Deep Gravel Mining Co., 56 Cal. 571 (1880); Haight v. Costanich, 184 Cal. 426, 194 P. 26 (1920).

^{218/} Lux v. Haggin, 69 Cal. 255, 10 P. 674 (1886).

^{219/} Id. at 342, 378-379.

^{220/} 9 Stats. at Large 519 (Sept. 28, 1850).

^{221/} Lux v. Haggin, 69 Cal. 255, 379, 10 P. 674 (1886).

^{222/} Id. at 343; San Joaquin and Kings River Canal and Irrigation Co. v. Worswick, 187 Cal. 674, 203 P. 999 (1922).

^{223/} Lux v. Haggin, 69 Cal. 255, 374, 376, 10 P. 674 (1886); Bole v. Lovejoy, 138 Cal. App. 202, 210, 31 P.2d 1084 (1934).

^{224/} Lux v. Haggin, 69 Cal. 255, 379, 10 P. 674 (1886).

c. The Rule of Priority

As between a riparian and an appropriator, as a rule one need merely compare the relative dates of the inception of the respective rights in order to determine the paramount right. The earlier right is the superior right. ^{225/} There is a major exception, however, to this rule of priority. When the point of diversion from the stream by an appropriator was on private land, that appropriative right was inferior to the rights of subsequent patentees of federal riparian land upstream of that point of diversion. ^{226/} The rationale is that diversions on private land were not "adverse" to the interests of the federal government in those upstream waters. Since a use was not made to which the government could have complained, such use was not one in which the government could have "acquiesced." ^{227/} It has never been decided whether such appropriative rights are also inferior to the rights of subsequent patentees of downstream federal land. ^{228/}

^{225/} The earliest cases recognized the rule of temporal priority where both the appropriator of water and the possessor of riparian land were trespassers on the public domain. Both were considered "appropriators": the squatter "appropriated" the land and usufruct in the water which the land abutted. As between the two, the rule of prior appropriation applied. Crandall v. Woods, 8 Cal. 143 (1857).

^{226/} Cory v. Smith, 206 Cal. 508, 510, 274 P. 969 (1929); Cave v. Tyler, 133 Cal. 566, 568-569, 65 P. 1089 (1901).

^{227/} Cave v. Tyler, 133 Cal. 566, 65 P. 1089 (1901).

^{228/} Under the rationale of "adverseness" and "acquiescence" and according to Hutchins in The California Law of Water Rights, *supra*, at 61, it would appear the exception does not apply to appropriations on private land against later patentees of downstream federal land.

This exception has been criticized, C. Meyers, Water Resources Management 152 (1971), as inconsistent with the "severance" theory announced in California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935). In fact, the exception is based on the theory in Lux v. Haggin that federal patents carried common law water rights. Since water rights were, instead, "severed" from federal patents under the authoritative California Oregon view, the exception is difficult to justify.

d. Illustration of the Rule: Paramountcy of the Appropriative Right

It is often loosely asserted that riparian rights in California are always superior to appropriative rights. ^{229/} In light of the foregoing discussion, it is obvious that appropriative rights may indeed be superior to riparian rights. Thus, in McKinley Brothers v. McCauley ^{230/} riparian rights on Putah Creek in Yolo County which were gained by an 1882 patent were held to be inferior to appropriative rights perfected in 1862. Other cases have similarly held the appropriative right to be superior to the rights of subsequent patentees of riparian land. ^{231/}

2. Reasonableness Limitations on the Exercise of the Riparian Right

a. Before the 1928 Amendment

Many of the riparian rights cases in California have involved the situation where the riparian right is superior to the appropriative right. While the superior appropriative right has always been limited to the quantity of water reasonably required to supply a beneficial use, ^{232/} no such limitation originally existed regarding the superior riparian right. Not only was the riparian as against an inferior appropriator not limited to a reasonable

^{229/} See e.g., Meridian v. San Francisco, 13 Cal.2d 424, 445, 90 P.2d 537 (1939); Fall River Valley Irrigation District v. Mount Shasta Power Corp., 202 Cal. 56, 72, 259 P. 444 (1927).

^{230/} 215 Cal. 229, 9 P.2d 298 (1932).

^{231/} Osgood v. El Dorado Water and Deep Gravel Mining Co., 56 Cal. 571 (1880); Farley v. Spring Valley Mining and Irrigating Co., 58 Cal. 142 (1881); Rindge v. Crags Land Co., 56 Cal. App. 247, 205 P. 36 (1922); and Jones v. Pleasant Valley Canal Co., 44 Cal. App.2d 798 (1941). See also cases cited in W. Hutchins, The California Law of Water Rights, supra, at 58-59 nn. 28, 29, 30.

^{232/} California Pastoral and Agricultural Co. v. Madera Canal and Irrigation Co., 167 Cal. 78, 85, 138 P. 718 (1914).

use of the water actually applied to the land, ^{233/} but the riparian could command the entire flow of the stream regardless of his current needs. ^{234/} In effect, the riparian could bar any use by an upstream appropriator.

The cases were based on one of two theories. The first theory regarded the riparian right as primarily a right of use and took the view that an appropriation of water constituted an injury to the riparian's right of future use and an impairment of the value of the riparian estate. ^{235/} The second theory regarded the riparian right as primarily a right to have a stream flow in its natural state limited only by upstream riparian uses, so that an appropriation of water constituted an invasion of the riparian right to the flow of the stream. ^{236/} Under either view the result was that any use by an upstream appropriator was held to be automatically hostile to the right of the downstream riparian owner, and the appropriative use could be enjoined without a showing of damage to the riparian owner.

A line of cases developed which attempted to mitigate the harshness of this rule. In Modoc Land and Livestock Co. v. Booth ^{237/} the court stated:

It seems clear that in no case should a riparian owner be permitted to demand, as of right, the intervention of a court of equity to restrain all persons who are not riparian owners from diverting any water from the stream at points above him, simply because he wishes to see the stream flow by or through his land undiminished or unobstructed....

The court went on to hold that the lower riparian, possessing a superior right, should not obtain an injunction "[W]hen the amount diverted by the inferior

^{233/} Miller and Lux v. Madera Canal and Irrigation Co., 155 Cal. 59, 64, 99 P. 502 (1909).

^{234/} Huffner v. Sawday, 153 Cal. 86, 94 P. 424 (1908).

^{235/} See I S. Wiel, Water Rights in the Western States, *supra*, at 872-894.

^{236/} W. Hutchins, The California Law of Water Rights, *supra*, at 189.

^{237/} 102 Cal. 151, 36 P. 431 (1894).

upstream appropriator would not be used by him and would cause no loss or injury to him or his land present or prospective..." ^{238/} but would be of benefit to the appropriator.

Later cases gave a restrictive interpretation to the holding in Modoc. In Anaheim Union Water District v. Fuller ^{239/} the court stated that the Modoc holding stood only for the proposition that a subsequent appropriator may impound and make use of extraordinary flood flows of which no riparian use can be made and which would be of considerable benefit to the appropriator. These cases distinguished earlier cases which had recognized a superior right in the riparian to the use of ordinary flood waters. ^{240/}

This sequence of cases culminated in Gallatin v. Corning Irrigation Company. ^{241/} The court there stated that ordinary (i.e., regularly recurring) flood waters were part of the natural flow of the stream to which the riparian right attached. Extraordinary flood waters, on the other hand, were asserted not to be part of the natural flow of the stream and thus were outside the ambit of the riparian right. ^{242/}

^{238/} Id. at 156-157.

^{239/} 150 Cal. 327, 88 P. 978 (1907).

^{240/} See Miller v. Bay Cities Water Co., 157 Cal. 256, 107 P. 115 (1910); Miller and Lux v. Madera Canal and Irrigation Co., 155 Cal. 59, 99 P. 502 (1907); Miller and Lux v. Enterprise Canal and Land Co., 142 Cal. 208, 75 P. 770 (1904).

^{241/} 163 Cal. 405, 126 P. 864 (1912).

^{242/} Gallatin and earlier cases all involved situations in which the so-called "ordinary" flood flows were being used and were of benefit to lower riparian owners and the so-called "extraordinary" flood flows were not. The court in Gallatin stated that flood waters, which are of no substantial benefit to and cannot be used by the riparian owner, can be taken by the appropriator, because they are not part of the flow to which the riparian right attaches. But if the riparian right definitionally does not attach to extraordinary flood flows because they are not part of the natural flow of the stream, then it is a matter of indifference whether such flows are of use and benefit to the riparian owner. If, however, the ability of the lower riparian to use and benefit from water is the critical factor, then the ordinary/extraordinary flood flows distinction is superfluous. The case law

In 1926, the California Supreme Court in Herminghaus v. Southern California Edison Co. held that, as against an inferior upstream appropriator, the downstream riparian owner could command the entire flow of the stream to flood his pastureland. In this case, it meant that 1,800,000 acre-feet of water per year would be needed in order to apply at most 54,000 acre-feet of that water to beneficial use on the riparian land. Conceding this to be an extremely wasteful use of water the court nonetheless held that, as against a subsequent appropriator, the riparian owner was not limited by any measure of reasonableness. 243/

b. Under the 1928 Amendment

The 1928 Amendment was a direct response to the holding of the Herminghaus case. The 1928 Amendment prohibited the waste of water and limited all water rights in California to reasonable beneficial uses:

It is hereby declared because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised

never settled this point. In Peabody the distinction between ordinary and extraordinary flood flows was said no longer to be appropriate. Ignoring the question of whether extraordinary flood flows are definitionally outside the riparian right, the court held that under the 1928 Constitutional Amendment the riparian owner could not enjoin the appropriative use of water in excess of the riparian owner's reasonable beneficial use. See also Hilbert v. Vallejo, 19 F.2d 510 (9th Cir. 1927); and Fifield v. Spring Valley Waterworks, 130 Cal. 552, 62 P. 1054 (1900). In addition to this line of cases, a scattered group of cases held the riparian to a standard of reasonable use as against an appropriator of inferior right: See, for example, Senior v. Anderson, 130 Cal. 290, 62 P. 563 (1900); Rindge v. Cragg Land Co., 56 Cal. App. 247, 205 P. 36 (1922); Arroyo Ditch and Water Co. v. Baldwin, 155 Cal. 280, 100 P. 874 (1909); Montecito Valley Water Co. v. Santa Barbara, 144 Cal. 578, 77 P. 1113 (1904). 243/ 200 Cal. 81, 252 P. 607 (1926).

with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water....

Specifically addressing riparian rights, the Amendment continues:

Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purpose for which such lands are or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which his land is riparian under reasonable methods of diversion and use.... 244/

In the decade following the passage of the 1928 Amendment several State Supreme Court decisions were handed down interpreting the Amendment and its effects. They held that a major effect of the Amendment was to limit the riparian owner as against a subsequent appropriator to the amount of water the riparian needed for reasonable beneficial use. 245/ Water in excess of the riparian's present reasonable beneficial use was declared to be surplus water available for appropriation, subject to the riparian's future water needs for reasonable beneficial uses. 246/

c. Effect of the 1928 Amendment

The issue of what remedy was available to the riparian owner as a consequence of the 1928 Amendment was very important. There was no question that a paramount riparian owner who was making a reasonable beneficial use of water could enjoin actual or threatened interference with

244/ Cal. Const. art. 10, sec. 2.

245/ See Gin S. Chow v. Santa Barbara, 217 Cal. 673, 22 P.2d 5 (1933); Peabody v. Vallejo, 2 Cal.2d 351, 40 P.2d 486 (1935); Meridian v. San Francisco, 13 Cal.2d 424, 90 P.2d 537 (1939).

246/ Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist., 3 Cal.2d 489, 45 P.2d 972 (1935).

that use. In the case where a public use was being made under an appropriate right, damages in lieu of injunction could be obtained. However, what remedy, if any, remained to the riparian making a beneficial but unreasonable use of water upon interference by an upstream appropriator was not clear.

The Amendment itself and cases which explicated the Amendment unequivocally state that the measure of the right is reasonable beneficial use. ^{247/} However, ambiguity was created by language in the cases which seemed to focus exclusively on the Amendment's withdrawal of injunctive relief. In Los Angeles v. Glendale, ^{248/} for example, the court stated that the effect of the Amendment was to remove the riparian's right "to object" to the appropriation of surplus in excess of his reasonable beneficial needs. Other cases emphasized that the riparian no longer had the remedy of injunction but ignored the question of whether a right to damages still existed. ^{249/} In Hillside Water Co. v. Los Angeles ^{250/} and Peabody v. Vallejo ^{251/} the Supreme Court concluded that the riparian uses in those cases were unreasonable yet remanded the causes (as suits in inverse condemnation) for a determination of damages. It was not clear in either case what the measure

^{247/} Cal. Const. art. 10, sec. 2; see also cases cited in notes 235, 236, supra.

^{248/} 23 Cal.2d 68, 142 P.2d 289 (1943).

^{249/} E.g., Meridian v. San Francisco, 13 Cal.2d 424, 446, 90 P.2d 486 (1935). However, dicta in these and other cases also strongly suggested that interference with unreasonable uses was not compensable. See, e.g., Peabody v. Vallejo, 2 Cal.2d 351, 369, 40 P.2d 486 (1935); and Los Angeles v. Aitken, 10 Cal. App.2d 460, 475, 52 P.2d 585 (1935).

^{250/} 10 Cal.2d 677, 76 P.2d 681 (1938).

^{251/} 2 Cal.2d 351, 40 P.2d 486 (1935).

of damages was to be. ^{252/} One commentator, in discussing these cases, noted that injunctive relief had been denied but that "in no case was compensation expressly denied." ^{253/}

This commentator and others concluded that the Amendment was only a "procedural" modification of riparian rights. They asserted that, under the Amendment, a riparian owner making an unreasonable use could not enjoin the appropriation of surplus above his reasonable beneficial needs, but was nonetheless entitled to damages for interference with his beneficial but unreasonable use. ^{254/}

This view was taken by the United States Supreme Court in United States v. Gerlach Livestock Co. ^{255/} In Gerlach, lower riparian owners on the San Joaquin River brought suit in inverse condemnation. The Bureau of Reclamation had built Friant Dam on the San Joaquin River as part of the Central Valley Project. Because of the dam, the lower riparian plaintiffs were deprived of water and silt that had been deposited on their

^{252/} In Peabody, the Supreme Court remanded for a determination of damages "taking into consideration ... the reasonable use of water now required by the law...." In Hillside, the Court recommended a physical solution in lieu of damages on the authority of Lodi v. East Bay Municipal Utility District, 7 Cal.2d 316, 60 P.2d 439 (1936). But it asserted that the overlying use of the City of Lodi was unreasonable (although it seems that the court in Lodi had found Lodi's use to be reasonable). Thus, this case was more likely than Peabody to support the proposition that while riparians making unreasonable uses could not enjoin upper appropriators, they were still entitled to damages.

^{253/} 1 Stanford L. Rev. 172, 175-177 (1948).

^{254/} Id.; S. Wiel, "The Pending Water Amendment to the California Constitution, and Possible Legislation", 16 Calif. L. Rev. 169 and 257 (1928); Bingham, "Some Suggestions Concerning the California Law of Riparian Rights", 22 Calif. L. Rev., 251 (1934); Treadwell, "Developing a New Philosophy of Water Rights", 38 Calif. L. Rev. 572 (1950); and see Malakoff, "Erosion of a Water Right or Just a Pile of Sand?" 4-5 Cal. Western L. Rev. 44 (1968-69).

^{255/} 339 U.S. 725 (1950).

grazing land during annual floods. While the Court conceded these uses to be wasteful and unreasonable, it nonetheless held that the uses were compensable, on the theory that the use had been in exercise of the lawful riparian right. Noting no California Supreme Court decision in point, the Court concluded that the 1928 Amendment meant only to deprive the riparian of his remedy of injunctive relief to protect unreasonable uses. If a beneficial although unreasonable use was damaged, compensation must be paid. ^{256/}

The issue of whether the loss of beneficial but unreasonable riparian use is compensable was finally squarely presented to the California Supreme Court in the Joslin case. ^{257/} Joslin, who operated a gravel business, brought a suit in inverse condemnation against the utility district whose dam had deprived him of the flow of water which carried gravel to his riparian land. The Court held that Joslin's riparian use was unreasonable under the 1928 Amendment. It declared that the Amendment was not merely procedural but was a substantive modification of the riparian right, and that Joslin was not entitled to damages. ^{258/} In its definitive statement of California law, the state's Supreme Court gave to the Amendment the full force of its ostensible meaning, that no right attaches to unreasonable use: if there is no right, there is no remedy, injunctive or otherwise. ^{259/}

^{256/} Id. at 752.

^{257/} Joslin v. Marin Municipal Water District, 67 Cal.2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967).

^{258/} Id. at 143-144.

^{259/} Although the Court in Joslin distinguished Gerlach, the two cases seem irreconcilable. To whatever extent they are inconsistent, Joslin's interpretation of Cal. Const. art. 10, sec. 2 must prevail. The California Supreme Court is the final and authoritative judge of state law.

d. Physical Solutions

In addition to injunction or damages, particularly where a public use has attached and injunctive relief is not available, for injury to the riparian's actual reasonable beneficial use, the court may impose a physical solution upon the parties in order to prevent waste. The power to impose a physical solution derives from the court's power to fashion equitable remedies. The policy underlying the 1928 Amendment has furnished a new impetus to seek a physical solution to allow the optimum use of water. ^{260/}

Situations which give rise to the need for physical solutions are generally those in which the downstream right is paramount. In such a situation, the downstream user is entitled to an injunction to assure that a sufficient quantity of water will reach him naturally to satisfy his superior right. Imposing an injunction in such a situation may cause a waste of water, for example where the lower user relies on percolation from the stream to supply his wells. ^{261/} A physical solution requires the inferior right holder to supply the superior right holder with water, either artificially or by improvements which increase the efficiency of

^{260/} In no case before 1928 did a court impose a physical solution upon a riparian for the benefit of an inferior appropriator strictly to prevent waste, although physical solutions in condemnation suits were permitted if damages provided inadequate relief. However, such physical solutions between riparians were allowed. In Wiggins v. Muscupiabe Land and Water Co., 113 Cal. 182, 45 P. 160 (1896) the upper riparian owner was allowed to transport artificially the amount of water to the lower riparian owner's land which would otherwise have naturally arrived, and was allowed to divert for his own benefit the water otherwise lost through instream evaporation and seepage.

^{261/} See Lodi v. East Bay Municipal Utility District, 7 Cal.2d 316, 60 P.2d 439 (1936), involving two appropriators. A physical solution operates against waste which occurs exclusively by virtue of the relative position of the parties on the stream. The "losses" involved are, for example, instream seepage and evapotranspiration, or unused water in an underground reservoir required to maintain a reasonably

the stream, to the extent of the superior right holder's right. The financial burden is on the inferior right holder. ^{262/} The superior right must remain substantially intact.

The benefit to the inferior right holder is that he can use the water saved from waste. The physical solution operates as a conditional injunction with non-performance by the inferior right holder resulting in injunction of the use in favor of the superior right holder. In cases where a public use has attached, a physical solution may be available in lieu of damages. ^{263/} In Rank v. Krug, ^{264/} for example, the inferior upstream appropriator (the United States Government) whose dam interfered with the regular flow to the downstream riparian owners, agreed to construct a series of holding ponds and forebays to assure a sufficient and uniform flow to supply the reasonable beneficial needs of the paramount riparian right holders. ^{265/}

e. The Rule of Reason

In Peabody v. Vallejo, ^{266/} the court indicated that "reasonableness" between a riparian and an inferior appropriator under the 1928 Amendment

usable level of water for an overlying user as against a water user on the stream which feeds the reservoir. This kind of waste is different from the waste absolutely enjoined by the 1928 Amendment, which results from the unreasonable use of water, the unreasonable method of use or the unreasonable method of diversion of water. In the former case, a court will protect the senior right by injunction and allow the waste to occur if the junior right holder fails to effectuate the physical solution. In the latter case, waste is absolutely prohibited, and a senior right holder engaging in wasteful practices is entitled to no protection at all.

^{262/} Id.

^{263/} Hillside Water Co. v. Los Angeles, 10 Cal.2d 677, 76 P.2d 681 (1938).

^{264/} 142 F. Supp. 1 (1956).

^{265/} A physical solution was recommended in Rancho Santa Margarita v. Vail, 11 Cal.2d 501, 81 P.2d 533 (1938) in a dispute between riparians, where the downstream riparian owner had a paramount right to a preferred domestic use of water for cattle watering.

^{266/} 2 Cal.2d 351, 40 P.2d 486 (1935).

derives from the "rule of reasonableness of use ... as between riparian owners ... as between appropriators ... as between owners overlying an underground water supply ... as between overlying owners and exporters from an underground basin to nonoverlying lands ... and as between riparian owners and overlying owners under the doctrine of common source of supply."^{267/}

However, reasonableness between riparians under the common law is a comparative concept, involving a balancing of the interests and equities of the parties.^{268/} In contrast, the appropriative right is based on a claim of exclusive right to an absolute quantity of water. The amount of water "reasonably necessary" for an appropriator's beneficial use does not depend on the situation or equities of competing users.^{269/}

The question, therefore, arises whether reasonableness under the 1928 Amendment as between a superior riparian owner and an inferior appropriator is absolute or relative. Several cases indicate that the standard is absolute. For example, the court in Peabody v. Vallejo focused on the method of use and method of diversion of the downstream riparian;^{270/} and the court in Tulare Irrigation District v. Lindsay-Strathmore Irrigation District referred to "local custom" to determine the efficiency of the riparian use.^{271/} The courts there did not "balance" the two uses.

In one sense, the court does "balance" the riparian use against the desirability of having a generally appropriable surplus under the constitutional mandate to maximize the utilization of water. In another sense equities are balanced between the riparian and the inferior appropriator

^{267/} Id. at 369.

^{268/} See Sections III, A, 1 and III, A, 2, (a), supra; and S. Wiel, supra, 16 Calif. L. Rev. 169, 200 (1928).

^{269/} Id. at 200.

^{270/} 2 Cal.2d 351, 40 P.2d 486 (1935).

^{271/} 3 Cal.2d 489, 547, 45 P.2d 972 (1935).

to decide who should bear which portion of the cost of a physical solution. ^{272/}
But if common law riparian reasonableness is the source of or has an impact
on the concept of constitutional reasonableness, then one might expect a
more specific consideration of the competing appropriative use.

One interpretation of Joslin v. Marin Municipal Water District ^{273/}
indicates that constitutional reasonableness does have a correlative aspect.
The case may be viewed as a balancing of the social utility of the municipal
use of water against that of the use of water for the accumulation of
gravel. ^{274/} A related alternative interpretation may be that whenever
municipal and gravel users compete, the gravel user must lose as a matter of
law. This view would make reasonableness analogous to the per se rules
of preferred riparian uses.

The opinion in Joslin could support a third interpretation, that
there was no balancing at all and that use of water for gravel transport
is always unreasonable regardless of the competing use. ^{275/} The second
and third interpretations raise the possibility, considered earlier, that
constitutional reasonableness may be amenable to per se rules. The courts,
including the Joslin court, have uniformly asserted that reasonableness
is a question of fact depending on a case-by-case determination. ^{276/}

^{272/} Rancho Santa Margarita v. Vail, 11 Cal.2d 501, 563, 81 P.2d 533 (1938),
citing Peabody at 376.

^{273/} 67 Cal.2d 132, 429 P.2d 889 (1967).

^{274/} See C. Lee, Legal Aspects of Water Conservation in California 19
(Governor's Commission to Review California Water Rights Law, Staff
Paper No. 3, 1977).

^{275/} In spite of this language indicating a case-by-case approach,
it certainly is not difficult to read Joslin as precluding a
riparian from ever contending that his use of a stream for such
a purpose is a substantive property right which cannot be taken
without payment of compensation.

Malakoff, 4-5 Cal. Western L. Rev. 44, 57 (1968-69).

^{276/} See, e.g., Tulare at 567.

This view has also been taken by the State Water Resources Control Board in its proposed regulations for Board actions under Water Code Section 275. ^{277/} But, the court in Joslin considered no fact save that municipal and gravel uses were to be made of the water; and if the court "balanced" or "compared" the competing uses, it did not do so explicitly.

C. Dormant Riparian Rights and Other Prospective Riparian Uses

1. The Right to Future Use Before and After 1928

Before 1928, present and future riparian uses were inseparable elements of the riparian right. Any substantial appropriative diversion of the natural flow of a stream was an actionable present injury to the downstream riparian rights. ^{278/} Even if the appropriation did not interfere with the riparian's present use, it was nonetheless an "invasion" of his right to future use. ^{279/} Thus, a prescriptive right could ripen against a downstream riparian owner without ever interfering with his actual use. ^{280/}

Under the 1928 Amendment, riparian owners still retain rights to prospective use. ^{281/} However, now only declaratory relief is available to vindicate an "invasion" of the right to future use. ^{282/} Since 1928, water in excess of the amount required to satisfy the present reasonable beneficial

^{277/} See "Notice of Proposed Changes to Regulations of the State Water Resources Control Board and the Department of Water Resources", June 8, 1977.

^{278/} Title Insurance and Trust Co. v. Miller and Lux, 183 Cal. 71, 85, 190 P. 433 (1920).

^{279/} Huffner v. Sawday, 153 Cal. 86, 94 P. 424 (1908).

^{280/} Pabst v. Finmand, 190 Cal. 124, 132, 211 P. 11 (1922).

^{281/} Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist., 3 Cal.2d 489, 525, 45 P.2d 972 (1935). Unless otherwise distinguished, "prospective use" includes both the expanded future uses of an active riparian right and the right of use of a completely dormant riparian right.

^{282/} Id. at 533-534.

needs of the riparian is appropriable surplus. ^{283/} Consequently, prescription will run only with an upstream use which actually interferes with the present riparian use. ^{284/}

2. No Loss by Nonuse - Interpretation in Statutory Adjudications

The riparian right to future use is predicated on the idea that riparian rights may not be lost by nonuse. As noted above, the forfeiture provision of Section 11 of the Water Commission Act, ^{285/} which purported to divest the riparian owner of all water which had not been applied to a useful and beneficial purpose for a continuous period of ten consecutive years, was struck down in the Tulare decision. ^{286/}

The court in Tulare said both that prospective riparian uses need not be quantified until they developed into actual uses, and that if

^{283/} Id. at 525.

^{284/} Pasadena v. Alhambra, 33 Cal.2d 908, 926, 207 P.2d 17 (1949).

^{285/} 1913 Cal. Stats. 1012.

^{286/} 3 Cal.2d 489, 530-531, 45 P.2d 972 (1935). The court in Tulare struck down Section 11, stating that it was a violation of due process and contrary to the letter and spirit of the 1928 Amendment. It declared that the Amendment "while limiting the riparian ... expressly protects future or prospective reasonable beneficial needs." However, a close reading of the Amendment fails to disclose wherein such express protection is to be found. This notwithstanding, Tulare's protection of prospective riparian uses may be resting on an unstable foundation, because of the court's new approach to "reasonableness" in Joslin.

The 1928 Amendment specifically limited the riparian right to reasonable uses. In Joslin, the court urged that a parochial and restrictive view of "reasonableness" is no longer satisfactory. Rather, the court:

1. took notice of changed conditions which require a new treatment of reasonableness;
 2. allowed public policy to play a much larger role in the determination of reasonableness; and
 3. indicated that "reasonableness" may now permit of general, across-the-board (per se) determinations, amenable to legislative treatment.
- Thus, if it were determined that prospective riparian uses interfere with the maximum utilization of surplus water and/or are detrimental to water resource planning, management, and conservation, then, in terms of transcendent statewide considerations, they might be unreasonable.

exercised pursuant to a generally superior right would be paramount to the intervening appropriator of the surplus. ^{287/} This situation has created uncertainty and has led to apprehension on the part of other water users that their uses may later and to an unknown extent be deprived of water by the exercise of theretofore unexercised riparian rights. ^{288/} This apprehension is similar to that experienced by state water rights holders regarding the potential exercise of water rights attached to reservations of federal land. ^{289/} Reserved federal rights, like riparian rights, need not be exercised in order to secure priority of right. Thus, as in the case of later appropriators on a stream with dormant riparian rights, intervening water users claiming rights to water under state law may at some point in the future be preempted by the exercise of reserved federal rights. ^{290/}

Quantification and priority of prospective riparian uses, addressed in Tulare, have been treated differently in certain statutory adjudications. In five of the thirteen statutory adjudications ever undertaken, future riparian rights were quantified as part of the final decree. In three of these

^{287/} Tulare at 525.

^{288/} See Los Angeles v. Glendale, 23 Cal.2d 68, 75, 149 P.2d 289 (1943); and F. Trelease, 22 Law and Contemporary Problems 301, 318 (1957).

^{289/} Under the "Winters doctrine", named for the seminal case of Winters v. United States, 207 U.S. 564 (1908), reservations of lands by the U. S. Government tacitly include reservations of federal water rights. These reserved rights, like riparian rights, are unaffected by non-use. They have as priority of right the date the reservation was made by Act of Congress or Executive Order. See Arizona v. California 373, U.S. 546 (1963).

^{290/} See F. Trelease, "Government Ownership and Trusteeship of Water", 45 Calif. L. Rev. 638, 652 (1957); and F. Trelease, Federal-State Relations in Water Law 162 (National Water Commission Legal Study No. 5, 1971).

adjudications they were accorded a priority for irrigation lower than active appropriative rights. ^{291/} The joint questions of quantification and priority of dormant riparian rights in a statutory adjudication decree are currently a matter of controversy in two cases pending in California appellate courts.

a. The Long Valley Creek Adjudication

The Long Valley Creek stream system is in Lassen, Sierra, and Plumas Counties. This stream system was recently adjudicated, and in a decree of the Lassen County Superior Court, the rights of a dormant riparian claimant were not recognized. The court held that the Board's authority to adjudicate riparian and appropriative rights was:

for the specific purpose of settling disputes between users of water and for the specific purpose of establishing permanent rights to water by the various claimants and users upon which said claimants could base an economy that could not be changed or ruined by some dormant riparian owner subsequently taking the water away from them by extending further use of his riparian right....

To allow dormant riparian owners to cast a shadow over uses of water by established developments would not only be inequitable but would create chaos. ^{292/}

An appeal to the Third District Court of Appeal has been filed. ^{293/}

The Long Valley stream system has been the subject of litigation since 1883. In one phase of this litigation, in an action between Appellant Ramelli and two other parties, amounts of water were awarded him for use on land where his riparian rights were being exercised, and the judgment recognized his unexercised riparian rights as well. ^{294/} The later statutory

^{291/} See note 131, *supra*.

^{292/} In the Matter of the Determination of the Various Claimants to the Waters of the Long Valley Creek Stream System within Lassen, Sierra, and Plumas Counties, California. Lassen County Superior Court No. 12999 (July 1, 1976).

^{293/} California State Water Resources Control Board v. Ramelli, 3 Civil 16344 (filed in Third District Court of Appeal Oct. 8, 1976).

^{294/} Evans v. Flagg, et al., Sierra County Superior Court No. 2809 (Jan. 7, 1972).

adjudication decree awarded Ramelli a different amount for his active riparian rights, and no water for his claimed dormant riparian right.

Ramelli contends that the statutory adjudication must recognize his unexercised riparian rights. He argues that those dormant rights must be given the same priority as all exercised riparian rights and that the dormant riparian rights are not subject to quantification.

The Board argues that although recognition of dormant riparian rights is permitted, the Board is obligated to set priorities so that the public interest will best be served:

Given hydrological facts of the Long Valley Creek stream system, ... a low priority for unexercised riparian rights would have been meaningless, since there is no expectation whatsoever of sufficient water to serve even existing uses. 295/

The Board relies upon Water Code Section 2769, supported by the Board's forty-year practice of quantifying riparian rights, to counter Ramelli's argument that dormant riparian rights may not be quantified. Statutory adjudications have resulted in the creation of the "adjudicated" or "decreed" right to water. The "decreed" right is unique in that it is the product of a comprehensive, system-wide adjudication, and not of an adjudication of a private dispute involving only a few water claimants on a stream.

b. The Soquel Creek Adjudication

The issue of the Board's authority to quantify dormant riparian rights is central to another statutory adjudication proceeding. In the decree involving claims on the Soquel Creek stream system in Santa Cruz County,

295/ Respondent's Brief at 48, California State Water Resources Control Board v. Ramelli, 3 Civil 16344 (June 2, 1977) (Emphasis added).

unexercised riparian rights were recognized, quantified, but given lower priorities than active appropriative rights. Exceptions to the decree were sustained by the trial court, 296/ and the Board has appealed. 297/

The trial court concluded in this instance, following Tulare, that prospective reasonable beneficial uses are protected by the 1928 Amendment and that "it is quite obvious that the quantity of water so required for such uses cannot be fixed in amount until the need for such use arises." 298/ As suggested by the Tulare court, the trial court reserved jurisdiction over parties to the adjudication. 299/ The court also held that under the 1928 Amendment dormant and active riparian rights must receive the same priority ranking.

The Board supports quantification of dormant riparian rights by reiterating the legislative history of the statutory adjudication procedure and points out that because the Tulare case did not involve a statutory adjudication, its language "has no application to a general adjudication in which the Legislature has explicitly directed that the final decree 'in every case' include a determination of the 'amount' awarded to each claimant...." 300/ The Board also argues that the purpose

296/ In the Matter of the Determination of the Rights of the Various Claimants to the Waters of Soquel Creek Stream System in Santa Cruz County, California. Santa Cruz County Superior Court No. 57081 (May 6, 1976). The Board sought immediate review in a petition for a writ of mandamus (People ex rel State Water Resources Control Board v. Superior Court of Santa Cruz County, 1 Civil 39807.) The Court of Appeal found the petition to be premature; the Supreme Court denied a petition for hearing.

297/ Chy Company v. State Water Resources Control Board, 1 Civil 41457 (filed in 1st D.C.A. March 10, 1977).

298/ Tulare at 525.

299/ The court also reserved jurisdiction over persons not named in the decree, which the Board contends is a violation of Water Code Section 2774 (West 1971). See Appellant's Opening Brief at 42-43, Chy Company v. State Water Resources Control Board, 1 Civil 41457 (August 23, 1977).

300/ Id. at 28.

of quantification and setting priorities is to ensure beneficial use of the entire water supply. The public interest requires that established users be given a higher priority than prospective users. Therefore, dormant riparians need not be given the same priorities as active riparians.

D. Riparian Right to Water Quality

1. Riparian Right to Water Quality - General

Water quality is an important element of a riparian right. In the Sacramento-San Joaquin Delta, the value of a riparian right is only the quality of the water, since adequate quantities of water always are available because of tidal action. In all streams, if an upstream user's return flow is polluted or degraded, the rights of downstream riparians may be impaired. There are substantial questions concerning a riparian's right to a certain quality of water, such as: To what quality of water is a riparian entitled? What types of legal action can a riparian take to protect his quality right? What right does a riparian have himself to lower the quality of a stream? Does a riparian quality right encompass salinity repulsion as well as the prevention of other types of pollution?

In the California cases which have involved riparian water quality rights, no single quality standard has been used. For example, in a 1934 case, the California Supreme Court set out apparently different standards in consecutive sentences:

Under the California authorities, ... a riparian owner, even as against another riparian, is entitled not only to an undiminished flow of water, except as reduced by the reasonable use of other riparians and prior appropriators, but also to a substantially unpolluted stream. The riparian owner is entitled not only to the same quantity of water, but also to the same quality of water, provided by nature in the stream. 301/

301/ Crum v. Mt. Shasta Power Corp., 220 Cal. 295. 312. 30 P.2d 30 (1934).

The concept that a riparian is entitled to the quantity and quality of water naturally flowing in a stream, the "natural flow" view of riparian rights, is not the general rule in California. ^{302/} California courts have made the following distinctions: ^{303/}

a. As between riparians, an upstream riparian may not impair the domestic use of a downstream riparian to any degree. In a 1965 California case, Deetz v. Carter, the court granted an injunction against an upstream riparian irrigator in favor of a downstream riparian domestic user where the entire streamflow was needed to insure that the lower riparian would have good quality water for domestic use. ^{304/}

b. As between riparians using water for non-domestic purposes, the riparians have an equal, correlative right to use the water of a stream. Each riparian has a right to a reasonable use of the stream, and "the test of whether the pollution by a riparian owner complained of is wrongful to another riparian owner is whether it is excessive so as to be unreasonable under all the facts, and not merely whether it interferes with the

^{302/} Kinyon, "What Can a Riparian Proprietor Do?", 21 Minn. L. Rev. 512, 519 (1936) discusses the natural flow view:

It does not clearly appear in the cases exactly what is meant by this requirement, but since the right of other proprietors is to have the stream flow in its natural condition, it would seem that the privilege extends only to those non-domestic uses which do not materially or unreasonably retard, diminish or pollute the natural flow of the stream. What constitutes a material or unreasonable retardation, diminution, or pollution is not entirely clear. In some jurisdictions any perceptible or noticeable effect on the stream seems to be regarded as material and unreasonable, while in others a more substantial effect seems to be necessary.

^{303/} These distinctions generally follow 1 S. Wiel, Water Rights in the Western States, *supra*, at 559.

^{304/} Deetz v. Carter, 232 Cal. App.2d 851, 856, 43 Cal. Rptr. 321 (1965).

lower riparian owner." ^{305/} The California cases have used a variety of language to describe this right: A riparian has a "right to insist that [the stream] shall not be polluted to his injury..."; ^{306/} a riparian "cannot exercise his right in such manner as to injure those below him maliciously or unnecessarily..."; ^{307/} riparians have a right to prevent a degradation of water quality that constitutes a nuisance; ^{308/} a lower riparian owner must bear "any slight impairment" or "slight inconveniences" or "occasional annoyances" caused by a reasonable upstream riparian use that degrades water quality, but the lower riparian does have a cause of action "where the injury [to water quality] is appreciable." ^{309/}

c. As between riparians and appropriators, the rule is substantially the same as between riparians. ^{310/} Prior to the 1928 Constitutional Amendment, degradation of water quality by a non-riparian was always wrongful, without regard to the amount or reasonableness of the degradation. ^{311/} The California Supreme Court clarified the riparian right to water quality vis-à-vis appropriators in 1939, in Meridian v. San Francisco:

Under the amendment of 1928 the rights of the riparian attach to, but to no more than so much of the flow as may be required or used consistently with the amendment. That is, the riparian is entitled to all of the water of the stream, both in the quantity and quality of its natural state, which he is able to put to a reasonable beneficial use, and to be protected in that right by the injunctive processes

^{305/} S. Wiel, supra, at 559 (emphasis added).

^{306/} Duckworth v. Watsonville Water and Light Co., 150 Cal. 520, 525, 89 P. 338 (1907).

^{307/} Holmes v. Nay, 186 Cal. 231, 241, 199 P. 325 (1921).

^{308/} Peterson v. City of Santa Rosa, 119 Cal. 387, 390 (1897); Joerger v. Pacific Gas and Electric Co., 207 Cal. 8, 25, 276 P. 1017 (1929).

^{309/} Joerger v. Pacific Gas and Electric Co., 207 Cal. 8, 25, 276 P. 1017 (1929).

^{310/} W. Hutchins, The California Law of Water Rights, supra, at 184.

^{311/} S. Wiel, supra, at 569.

of the court. But the riparian owner is not entitled to an injunction to control the use of water by an appropriator in the exercise of a right admittedly subordinate but in no way injurious to the riparian right. 312/

The court in Meridian v. San Francisco found that there was "no substantial impairment" of water quality at the plaintiff riparian's place of diversion, that an injunction against storage by the defendant appropriator would be justified only by "actual pollution", and that "the alleged 'serious and threatening' damage of pollution" was not enough. 313/

In summary of the above three points, it appears that a riparian has a cause of action for degradation of water quality when the degradation is unreasonable, when it constitutes a nuisance, or when water is polluted, although there appears to be no uniform definition of "pollution" in the riparian water quality case law. 314/ And, at least as against other riparians, a riparian right for domestic use is entitled to more stringent protection.

Another question is to what extent a riparian has or can obtain a right to degrade water quality as a result of his riparian use. One commentator suggested that a riparian may be able to obtain a prescriptive right unreasonably to lower water quality:

If there is a riparian 'right' reasonably to lower the quality of waters, it could be argued that an unreasonable lowering of water quality is a nonriparian use and therefore is not entitled to any form of protection whatever. If this position is adopted, then it would seem that a riparian owner

312/ Meridian v. San Francisco, 13 Cal.2d 424, 447 90 P.2d 537 (1939).

313/ Id. at 451-52. There appear to be no appellate cases which determine the relative rights of riparians and appropriators when domestic use is involved.

314/ See e.g., 1 E. Clark, Water and Water Rights, supra, at 391: "Under the American reasonable-use rule pollution is an unreasonable use, but a precise definition of pollution has proved troublesome and there are additional problems in determining how much pollution is reasonable."

could acquire by prescription a right to use the water unreasonably and thus could plead the statute of limitations as bar to any action based upon private nuisance and riparian rights. Similarly the defense of laches should be available.... Neither defense should be available in a suit based on public nuisance however; nor should they affect the ability of the state to regulate and restrict such discharges by upstream users. 315/

The California Supreme Court case of Wright v. Best considered the concept of an upstream user's acquiring an easement to pollute:

Although no authority has been cited for or against the proposition that an easement may be attached to a water right, there is no legal or practical objection to the creation of such an incident. A prescriptive right to pollute a water-course may be acquired as against lower riparian users and their successors in interest provided the deterioration in quality is not so great as to constitute a public nuisance. 316/

Whatever right a riparian may have or acquire to degrade the water quality of a stream in general, that right is now greatly affected by statutory water quality standards.

2. The Effect of Water Quality Statutes on the Riparian Water Quality Right

Water quality statutes affect riparian rights as well as all other water rights. A major shift has occurred in the whole area of water quality rights:

As a result of greater governmental activity in water quality and greatly increased public interest ... the principal forum for resolution of water quality conflicts has shifted to the administrative areas and the suits are by the state against private parties instead of between private parties. 317/

315/ R. Robie, "Relationships Between Water Quality and Water Rights", in Johnson and Lewis, Ed., Contemporary Developments in Water Law 75 (1970).

316/ Wright v. Best, 19 Cal.2d 368, 382, 121 P.2d 701 (1942).

317/ R. Robie, supra, note 15, at 79.

The Porter-Cologne Water Quality Control Act ^{318/} provides for a program to control the quality of all the waters of the State. The Legislature declared that the state policy is to regulate water quality "to attain the highest water quality which is reasonable...." ^{319/} Now dischargers of waste into streams must file a report of waste discharge with a Regional Water Quality Control Board if the discharge "could affect the quality of the waters of the state", ^{320/} and the Regional Board must prescribe water discharge requirements which will implement relevant water quality control plans. ^{321/} A Regional Board has the power to issue cease and desist orders when it "finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the Regional Board...." ^{322/}

The Porter-Cologne Act makes it likely that an injured riparian would seek the assistance of a Regional Water Quality Control Board when an upstream point discharge pollution problem arises before initiating a private action. Besides this immediate effect of giving a possible administrative recourse, the Act also may limit the possibility that a riparian discharger can claim a right to degrade water quality on the basis of right, prescription, or easement:

^{318/} Cal. Water Code Section 13000 et seq. (West 1971). Although not separately discussed, the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, also significantly affect water rights.

^{319/} Cal. Water Code Section 13000 (West 1971).

^{320/} Cal. Water Code Section 13260(a) (West 1971).

^{321/} Cal. Water Code Section 13262(a) (West 1971).

^{322/} Cal. Water Code Section 13301 (West Supp. 1977). The State Water Resources Control Board can also issue cease and desist orders. If a cease and desist order is not complied with, the Board can ask the Attorney General to institute judicial action. Cal. Water Code Section 13331 (West 1971).

Section 13262(g). No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights. 323/

The Porter-Cologne Act also provides a definition of "pollution" that relies on a determination of reasonableness, as the case law preceding the Act generally did:

Section 13050(1). 'Pollution' means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects: (1) such waters for beneficial uses, or (2) facilities which serve such beneficial uses. 'Pollution' may include 'contamination'. 324/

3. Special Problems of Delta Riparians

The Legislature has recognized that the Sacramento-San Joaquin Delta has "unique" problems within the State:

[T]he merging of fresh water [from the Sacramento and San Joaquin Rivers] with saline waters and drainage waters and the withdrawal of fresh water for beneficial uses creates an acute problem of salinity intrusion into the vast network of channels and sloughs of the Delta.... 325/

The Legislature has declared that "maintenance of an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta area and to provide a common source of fresh water for export to areas of water deficiency" is necessary for the general welfare of the people of the State. 326/ A function of the State Water Resources Development System, in conjunction with the operation of the Federal Central Valley Project, is to provide for "salinity control and an adequate water supply for the uses of water

323/ Cal. Water Code Section 13262(g) (West 1971).
324/ Cal. Water Code Section 13050(1) (West 1971).
325/ Cal. Water Code Section 12200 (West 1971).
326/ Cal. Water Code Section 12201 (West 1971).

in the Sacramento-San Joaquin Delta" or for a substitute supply without added cost to Delta users. ^{327/} Delta users are declared to be subject to area of origin protection. ^{328/} The Water Code also provides that "repulsion of salt water" is a beneficial use which must be given full consideration in water development project studies. ^{329/}

In 1971 the State Water Resources Control Board adopted its Decision 1379. ^{330/} The Board's objective was to require Delta exporters and upstream diverters, the Department of Water Resources, and the Bureau of Reclamation, "to provide water of suitable quality for the beneficial uses specified either by maintaining in-channel supplies or by substitute facilities." ^{331/} Decrease in Delta outflow caused by upstream storage and pumping from the Delta causes salt water to intrude further into the Delta than it would in a state of nature. The Board declared that the exporters must operate their projects "so as not to cause any material

^{327/} Cal. Water Code Section 12202 (West 1971).

^{328/} Cal. Water Code Sections 12201 and 12202 (West 1971) provide that water supplied to the Delta for either Delta use or export is subject to the County of Origin (Cal. Water Code Section 10505) and Watershed Protection (Cal. Water Code Section 11460 et seq.) statutes. Cal. Water Code Section 12931. However, a part of the California Water Resources Development Bond Act provides that the Delta is "deemed to be within the watershed of the Sacramento River."

^{329/} Cal. Water Code Section 12581 (West 1971).

^{330/} California State Water Resources Control Board, Decision 1379, "Delta Water Rights Decision" (July 1971). In October, 1971, a suit was filed to set aside Decision 1379 (Central Valley East Side Project Assn., et al. and Kern County Water Agency, et. al. v. State Water Resources Control Board, Civil Nos. S2582 and S2583, U.S. Dist. Ct. (E.D. Cal.)) and in January 1972, the court issued an injunction preventing implementation of Decision 1379 until the case was decided. Decision 1379 had rescinded an earlier decision, Decision 1275 (as modified by Decision 1291); as a result of the injunction, Decision 1275 became operative again. In September 1976, the order enjoining the use of Decision 1379 was modified to allow the Board to use the Decision 1379 evidentiary record in the Delta water rights hearings.

^{331/} California State Water Resources Control Board, Decision 1379, "Delta Water Rights Decision", 36 (1971).

deterioration of the quality of water which would impair its usefulness for the beneficial uses which are made of the water by senior rights holders." 332/

The Board does not have jurisdiction to adjudicate or determine the validity of individual vested water rights--this is a judicial function. In view of the Board's determination ... that beneficial uses of water in the Delta must be protected in the public interest without regard to whether or not the users have prior vested rights, the legal basis upon which such rights depend is of significance only to indicate to what extent compensation is required for benefits to those rights by virtue of the subject projects. 333/

The Board provided for the protection of beneficial Delta uses by imposing appropriate terms in the Department's and Bureau's permits so that certain Delta water quality standards, which the Board called State Delta Standards, would be met. 334/

These legislative and administrative determinations appear to provide Delta water users, including Delta riparians, with a statutory basis for claiming a right to usable water quality. A determination of the extent of Delta riparian rights under state case law is important as a separate

332/ Id. at 8.

333/ Id.

334/ Id. at 36-37. In general, the two Regional Water Quality Control Plans that cover the Sacramento-San Joaquin Delta and Suisun Marsh set essentially the same water quality standards as Decision 1379 State Delta standards. In response to emergency drought conditions, and because the State Water Resources Control Board had not scheduled adoption of a comprehensive long range water quality control plan for the Delta and Suisun Marsh until the end of 1977, the State Water Resources Control Board adopted the Interim Water Quality Control Plan for 1977 for the Sacramento-San Joaquin Delta and Suisun Marsh (February, 1977). The Interim Plan will expire on Dec. 31, 1977. In March, 1977, a suit was filed to set aside the Interim Plan. (Contra Costa County Water Agency v. State Water Resources Control Board, Contra Costa County Superior Court, Civil No. 172975.) In June, 1977, the Board adopted Emergency Regulations containing new Delta protection standards. These regulations are to be in effect only until Dec. 31, 1977, unless extended by the Board.

issue, however, particularly because Delta riparians are negotiating with the Bureau of Reclamation and the Department of Water Resources for water supply contracts. Delta riparians will pay for the benefits received as a result of project operations. ^{335/} A key question in the negotiations is whether usable quality is an inherent element of a riparian right, where quality degradation is caused by salinity intrusion due to insufficient Delta outflow.

There appear to be no California appellate court cases that consider the right of riparians to salinity repulsion as an element of their right to water quality. ^{336/} The question of salinity repulsion was considered in the 1922 California Supreme Court decision, Town of Antioch v. Williams Irrigation District, which held that Antioch could not require upstream diverters to allow 3500 cfs. to pass Sacramento in order that it could use 1 cfs. under its appropriative right:

[A]n appropriator of fresh water from one of these streams at a point near its outlet to the sea does not, by such appropriation, acquire the right to insist that subsequent appropriators above shall leave enough water flowing in the stream to hold the salt water of the incoming tides below his point of diversion. ^{337/}

It is not certain that the courts would come to the same conclusion where downstream riparians rather than appropriators are involved, and where

^{335/} California State Water Resources Control Board, Decision 1379, "Delta Water Rights Decision", 8 (1971): "[T]he rights of users of water on riparian lands and appropriators in the Delta extend only to water quality and quantity which would have existed in the absence of the projects, taking into consideration current upstream uses under vested rights." See also p. 15: "Nowhere does the Board find any California law which provides that the Delta users shall be provided with surplus in excess of their vested rights without payment."

^{336/} It may be possible to analogize the Delta riparian salinity repulsion situation to that of overlying groundwater pumpers in basins with salt water intrusion problems.

^{337/} Town of Antioch v. Williams Irr. Dist., 188 Cal. 451, 465, 205 P. 688 (1922).

substantially greater amounts of water are concerned. And, as the State Water Resources Control Board noted in Decision 1379, "present laws such as the Environmental Quality Act of 1970 might well compel a different decision from that reached in the Antioch case." 338/

A central issue involved in this area is whether, even if salinity repulsion is a beneficial use, salinity repulsion is a reasonable use of water in the Delta. In this area, especially, reasonableness is a matter of degree, and salinity repulsion may be a reasonable use of water to some extent, an extent which may differ from year to year.

338/ California State Water Resources Control Board, Decision 1379, "Delta Water Rights Decision", 14 (1971).

IV. Transfer of Riparian Rights

As a general rule, riparian rights can be transferred only in conjunction with a conveyance of some portion of riparian land. Attempts to transfer the right alone are ineffective except to prevent the transferor from asserting that the transferee gained no right by the conveyance.

A. Transfer of the Entire Riparian Tract

Because the riparian right is "part and parcel" of the riparian estate, a deed transferring riparian land which is silent as to disposition of water rights will transfer the riparian rights as well. ^{339/} Riparian rights will accompany a transfer of riparian land except where the deed expressly provides that they do not.

B. Subdivision of the Riparian Tract

A different rule applies depending on whether the portion of the subdivided riparian tract remains contiguous to the stream or becomes a non-contiguous or "back parcel."

1. Conveyance of a Contiguous Parcel

The rule where the parcel conveyed is contiguous to the stream is the same as where the entire riparian tract is transferred. A silent deed will transfer the riparian right. ^{340/}

A contiguous parcel may lose its riparian rights if the grantor expressly or impliedly reserves to his remaining riparian land the riparian rights of the granted parcel. In this case, the riparian rights are "severed" from the granted land. ^{341/}

^{339/} Strong v. Baldwin, 137 Cal. 432, 97 P. 178 (1902).

^{340/} Holmes v. Nay, 186 Cal. 231, 199 P. 325 (1921).

^{341/} Id.

2. Conveyance of a Non-contiguous Parcel

Where a subdivision of a riparian tract results in the loss of physical contiguity to the stream, the back parcel may retain riparian rights. When this occurs, it is the only instance in which land not abutting a watercourse can have riparian rights. 342/

A deed conveying a back parcel that is silent as to the disposition of water rights will not of itself serve to transfer riparian rights. 343/ Rather, express provision for the transfer of riparian rights must appear in the deed, or the circumstances must be "such as to show that the parties so intended." 344/

C. Grant of the Riparian Right Alone

A riparian owner's transfer of his right to use water to a non-riparian landowner is not a transfer of the riparian right. Rather, the effect of the grant

is simply to convey the grantor's right to the use of the water on his own riparian land and to estop the grantor to complain against any use of the water which the grantee may make to the injury of such riparian right. 345/

342/ The subdivision may be the result of a judicial partition of a cotenancy. See note 344, *infra*.

343/ Hudson v. Dailey, 156 Cal. 617, 105 P. 748 (1909).

344/ Holmes v. Nay, 186 Cal. 231, 199 P. 325 (1921). The riparian right can be transferred or severed from the land not only by a voluntary transfer but also by a judicial partition of riparian lands which have been held in common ownership. If the partition decree is silent as to the division of riparian rights, each parcel, including those that as a result of the partition no longer abut the stream, retain their riparian status. If, however, the partition decree expressly preserves or severs the riparian right in specific parcels, those parcels retain or lose their riparian rights to the extent provided for in the decree. If the decree preserves such rights in some of the non-abutting parcels and is silent as to others, the latter lose their riparian rights by implication. See Rancho Santa Margarita v. Vail, 11 Cal.2d 501, 81 P.2d 553 (1938); and Rose v. Mesmer, 142 Cal. 332, 75 P. 905 (1904).

345/ California Pastoral and Agricultural Co. v. Madera Canal and Irr. Co., 167 Cal. 78, 86, 138 P. 718 (1914).

While the grantee and his successors in interest have a right to use water good against the grantor and his successors in interest, ^{346/} the grantee has no right good against other riparian owners on the stream. Since a riparian proprietor has, himself, no right as against other riparians to use water on non-riparian land, he cannot grant such a right to another. ^{347/}

A similar rule applies where the grantee is also a riparian owner. Because the grantor had only the right to use water on his own riparian land, the grantee gains no right by the conveyance to use water on a different riparian tract as against other riparian owners. ^{348/}

^{346/} While some authorities have described this as an estoppel running with the land (Spring Valley Water Co. v. Alameda County, 88 Cal. App. 157, 168, 262 P. 318 (1927)), others have said that an easement burdening the grantor's land has been created. (Wright v. Best, 19 Cal.2d 368, 382, 121 P.2d 702 (1924)).

^{347/} Duckworth v. Watsonville Water and Light Co., 150 Cal. 520, 89 P. 338 (1907).

^{348/} Id. at 526

V. Condemnation and Prescription

In addition to the loss of the riparian right by "severance", as discussed in Section IV, the right may be lost by the exercise of the power of eminent domain or by prescription. The power of eminent domain, or condemnation, involves a taking of the right for a public purpose. Prescription involves the loss of the right to a private party who wrongfully interferes with it for a period of five years.

A. Condemnation

The riparian right is, like all private property rights, subject to the governmental power of eminent domain. The riparian right, although parcel of the land, may be taken alone, without further damage to the riparian land. ^{349/} In order for a condemnation to be valid, the condemnor must have constitutionally or legislatively delegated authority to take property for the proposed use, the use for which property is taken must be a public use, and just compensation must be paid.

Riparian rights may be taken for a public use either by a formal exercise of the power of eminent domain or by a suit in inverse condemnation brought by the riparian owner to recover damages for the taking or damaging of his riparian right for a public use. The "public use" of water by water distribution agencies is defined in the California Constitution:

The use of all water now appropriated, or that may hereafter be appropriated, for sale, rental, or distribution, is hereby declared to be a public use.... ^{350/}

The constitutional provision not only indicates situations in which governmental entities may properly condemn water rights for the public use

^{349/} Alta Land & Water Co. v. Hancock, 85 Cal. 219, 24 P. 645 (1890).
^{350/} Cal. Const. art. 10, sec. 5.

of water but also tacitly authorizes the exercise of the power by organizations which provide services as public utilities. ^{351/}

Generally the owner of a paramount riparian right who is substantially damaged by an appropriator is entitled to injunctive relief. This remedy is lost, however, if a public use has intervened through the construction and operation of public works by public agencies before the injunction is sought. ^{352/} The proceeding then becomes in fact a suit in inverse condemnation, a proceeding to fix damages after rather than before the taking. ^{353/}

B. Prescription

A riparian right may be lost by prescription. Where a party wrongfully uses water to the injury of the lawful riparian right, in a manner which is open, notorious, hostile, exclusive, continuous and under claim of right, his use gives rise to a cause of action in the injured riparian owner. Failure to sue on that cause of action for a period of five years results in a loss of the riparian right. ^{354/} The measure of the right lost by the riparian and gained by the prescriptor is the quantity of water applied by the prescriptive user to a reasonable beneficial use under reasonable methods of diversion and use. ^{355/}

The essential requirement for prescription is the invasion of a protectible property interest by an "adverse" use. As a rule, a prescriptive right cannot be gained by a downstream user of water against an upstream riparian. Once the water has flowed past the lower boundaries of the

^{351/} Hildreth v. Montecito Creek Water Co., 139 Cal. 22, 29, 72 P. 395 (1903); Thayer v. Cal. Dev. Co., 164 Cal. 117, 128 P. 21 (1912).

^{352/} Peabody v. Vallejo, 2 Cal.2d 351, 40 P.2d 486 (1935).

^{353/} Collier v. Merced Irr. Dist., 213 Cal. 553, 2 P.2d 790 (1931).

^{354/} Pasadena v. Alhambra, 33 Cal.2d 908, 926-27, 207 P.2d 17 (1949).

^{355/} E. Clemens Horst Co. v. Taro Mining Co., 174 Cal. 430, 163 P. 492 (1917).

upstream riparian owner's land, it is not of consequence to him how or by whom water is used downstream. Because a downstream use causes no injury, it is not "adverse". ^{356/}

To the extent that riparian property interests differ depending upon whether the competing use is riparian or appropriative, the nature of the adverse use will also differ depending upon whether the upstream user is a riparian or an appropriator. Also, to the extent that the riparian right was limited in 1928 to reasonable beneficial uses as against an appropriator, the concept of what constitutes "adverse use" by an appropriator has likewise changed.

1. Adverse Use By an Upstream Riparian

For a riparian owner to make a use of water adverse to a downstream riparian, his use must be "unreasonable". Such unreasonable use could be made in one of two manners: He could make a "non-riparian" or appropriative use (e.g., on non-riparian land, out of the watershed, or for seasonal storage for electrical generation); or he could use water for a proper riparian purpose but in excess of his fair share of the stream for that use. In the former case the situation is precisely that of a non-riparian appropriator. In the latter case adversity depends on the needs and desires of the downstream riparian. In Pabst v. Finmand the court said that where the downstream riparian has no present desire to use water, use of the whole flow by the upper riparian will not ripen into a prescriptive right. ^{357/} In Anaheim Union Water Co. v. Semitropic Water Co.

^{356/} Hargrave v. Cook, 108 Cal. 72, 78-79, 41 P. 18 (1895).

^{357/} 190 Cal. 124, 129, 211 P. 11 (1922).

the court said that there can be no prescription in times of abundance.^{358/}

The Pabst view comports with the theory of reasonable use: Reasonableness is determined by a consideration of the needs of all riparians and if a co-riparian has no need or desire to use water, then it is not unreasonable for another riparian to use all the water. If the upper riparian's use is therefore reasonable, then it is not adverse and cannot form the basis of a prescriptive right. While some cases have held that the "claim" of an adverse use by the upstream riparian can defeat the presumption of reasonable upstream riparian use to which the downstream riparian is entitled,^{359/} the mere assertion of adverseness should not replace the requirement of actual adverseness.^{360/} The mere claiming of a prescriptive right by the upper riparian does not create adversity any more than it does for a downstream riparian's claim of prescriptive right against an upstream riparian.

2. Adverse Use By an Upstream Appropriator

a. Pre-1928

According to the general rule that a riparian of paramount right could enjoin any non-trivial upstream appropriative use whether the riparian was harmed or not, it followed that the riparian's failure to

^{358/} 64 Cal. 185 (1883). An opposite view had been taken before Pabst. Morris v. Harrison, 93 Cal. 676, 29 P. 325 (1892), Miller & Lux v. Enterprise Canal and Land Co., 142 Cal. 208, 75 P. 770 (1909), and Lux v. Haggin, 69 Cal. 255, 10 P. 674 (1886) all stated in dictum that apart from preferred domestic uses the upstream riparian could not of right use the entire flow of the stream, and that prescription would run in favor of such wrongful use. Even after Pabst, there has been a tendency to the older view. Thus, in Morgan v. Walker, 217 Cal. 607, 20 P.2d 660 (1933), the court upheld a prescriptive right in an upstream riparian without ever examining the needs or desire of the lower riparian to use the water. In fact, the court referred in passing to the fact that little or no use had ever been made by the downstream riparian.

^{359/} Moore v. California Oregon Power Co., 22 Cal.2d 725, 140 P.2d 798 (1943).

^{360/} Hargrave v. Cook, 108 Cal. 72, 78, 41 P. 18 (1895).

seek judicial relief would result in the loss of his right after five years. Any non-riparian upstream use which sensibly diminished the natural flow of the stream to the riparian owner was adverse. ^{361/} The non-riparian use constituted an "injury" to the riparian right, whether the injury was described as an injury to the riparian's right to future use, to his right to the undiminished natural flow, or as an impairment of his riparian estate. ^{362/}

Because such non-riparian use was automatically adverse to the riparian right and because the riparian owner was perhaps relatively indifferent to technical injuries which did not interfere with his current needs, prescriptive rights against riparian owners proliferated. In his celebrated address in 1922, Justice Shaw underlined the importance and extent of prescription against riparians in making available water held under riparian right for important irrigation uses on non-riparian land. ^{363/}

b. Post-1928

The 1928 Amendment limited the riparian to reasonable beneficial use. From the earliest cases interpreting the Amendment, it has been consistently held that the effect of the Amendment was to remove the ability of the

^{361/} 1 S. Wiel, Water Rights in the Western States, supra, at 858-59.
^{362/} See discussion above, Section III, B, 2(a). In Modoc Land and Live Stock Co. v. Booth the court held that a riparian was not injured by an appropriation of water in excess of his present and future needs.

Modoc Land and Live Stock Co. v. Booth, 102 Cal. 151, 36 P. 431 (1894). Although this case does not address prescription directly, it would follow that a prescriptive right could not run against that portion of the flow in excess of present and future riparian needs. The holding in Modoc implies some concrete estimation of future use or possibility of future use. Other cases, speaking of injury to "future use" to prohibit all appropriative uses, appear either to assume the unlimited capacity of the riparian to make future use of water, or to employ the expression to denote a property concept rather than a practical estimation of future use.

^{363/} 189 Cal. 779 (1922).

riparian owner to complain of the appropriative use of water in excess of the riparian's reasonable beneficial needs.

Tulare Irrigation District v. Lindsay-Strathmore Irrigation District held that the 1928 Amendment calls for quantification of present beneficial riparian uses, in order to identify surplus water which an inferior appropriator could rightfully use. ^{364/} It appeared that, after the Amendment, prescription could only run in favor of the appropriative use which interfered with the present reasonable beneficial use of the downstream riparian.

However, in Tulare, Peabody v. Vallejo, and Meridian v. San Francisco,^{365/} the court at least implied that prescription might run against the riparian's right to future use by the appropriation of this surplus. In Peabody the court referred to the appropriation of surplus as a "technical infringement" of the riparian right and stated that such infringement was not actionable except to establish priority. It also stated, however, that to protect his right of future use, the riparian owner was entitled to a declaratory judgment and an "injunction against the assertion of an adverse use... which might otherwise ripen into a prescriptive right." ^{366/} In Tulare the court recommended a declaration establishing the priority of future riparian uses in present surplus so that "[t]he right of the riparian will be fully protected against the appropriative use ripening into a right by prescription...." ^{367/}

^{364/} 3 Cal.2d 489, 45 P.2d 992 (1935).

^{365/} Meridian v. San Francisco, 13 Cal.2d 424, 90 P.2d 537 (1939).

^{366/} 2 Cal.2d 351, 374, 382-83, 40 P.2d 486 (1935).

^{367/} 3 Cal.2d 489, 525, 45 P.2d 972 (1935).

In two cases, Seneca Consolidated Gold Mines v. Great Western Power Co. and Moore v. California Oregon Power Co., decided in 1930 and 1943, the California Supreme Court treated appropriative use as prescriptive against riparians regardless of actual injury. In Seneca the upstream use of water for electrical generation, involving periodic storage and release, was held to be a non-riparian or appropriative use. The court queried "But to what extent may such owner retain, store or impound the water before the right ceases to be a riparian one and becomes an adverse or appropriative right which may ripen into a prescriptive one, is the question," and later concluded "the defendant thus possessing prescriptive rights in the stream, they are conclusively presumed to be injurious to the riparian right of the plaintiff." ^{368/} Moore v. California Oregon Power Co., also dealing with the seasonal storage of water for electrical generation, held that any appropriative use is automatically adverse to a lower riparian use regardless of harm:

The next contention is that the use of waters of a stream is adverse to the rights of the lower riparian owner's rights whether or not he is damaged. A number of authorities are cited in support of this contention. The cases cited are all in actions in which injunctive relief was asked and we are in thorough accord with the rulings contained therein. ^{369/}

The inversion of reasoning in Seneca and Moore may also have underlain the statements in Tulare and Peabody that prescription could run against a riparian right, even though the riparian could not obtain an injunction or damages against the appropriator-prescriptor. One commentator disputed this reasoning:

^{368/} 209 Cal. 206, 215, 219, 287 P. 93 (1930), emphasis added. Seneca was decided before the seminal cases of Gin S. Chow v. Santa Barbara, 217 Cal. 673, 22 P.2d 5 (1933); Peabody v. Vallejo, 2 Cal.2d 351, 40 P.2d 486 (1935).

^{369/} 22 Cal.2d 725, 738, 140 P.2d 798 (1943).

... to say that an action must be given the riparian to prevent prescription running against him, under the American law of prescription is to put the cart before the horse. If the cause of action is not given prescription will not run. 370/

In Pasadena v. Alhambra the court finally declared that, based upon the 1928 Amendment, "Prescriptive rights are not acquired by the taking of surplus or excess water, since no injunction may issue against the taking and the appropriator may take the surplus without giving compensation."371/ Justice Carter, dissenting in Alhambra, removed whatever ambiguity may have remained. He said that, under the view of the majority, which he also saw as the view of the court in Gin Chow and Peabody, so long as only surplus water in a stream is taken, prescription cannot run:

Under this interpretation, one who diverts water for a non-riparian use can never acquire a right to the water diverted and beneficially used by him as against a riparian owner who does not see fit to use his share of the water of the stream to which his land is riparian. 372/

In Rank v. Krug the federal district court agreed that the 1928 Amendment had wrought a change in the law of prescription. It declared that, now, in order for prescription to run, there must be an invasion of the riparian's present reasonable beneficial use, and that prescription will therefore not run against surplus. 373/

370/ Bingham, "Some Suggestions Concerning the California Law of Riparian Rights," 22 Cal. L. Rev. 251, 259 (1934). See Seneca at 218.

371/ 33 Cal.2d 908, 926, 207 P.2d 17 (1949).

372/ Id. at 944-45.

373/ 142 F. Supp. 1, 113 (1956).

VI. Issues

Riparian water rights issues can be divided into three main areas of inquiry: the possibility of incorporating riparian rights into the permit system, the possibility of otherwise modifying the riparian doctrine itself, and the strengthening of reporting requirements. These areas of inquiry are interrelated, and it is conceivable that changes proposed in one area would be advantageous in the other areas as well.

- I. Should riparian water rights be incorporated into the permit system?
 - A. What riparian rights should be included in the permit system?
 1. Present riparian uses?
 2. Prospective riparian uses?
 3. Domestic uses of water? Only above a certain amount?
 4. Riparian uses only on certain streams or in certain areas?
Which streams or areas?
 - B. How can inclusion in the permit system be accomplished?
 1. Should present riparian uses be quantified?
 2. Should prospective riparian uses be quantified?
 3. Should riparian rights be limited to present use?
 4. Should riparians be required to apply for permits, with failure to apply within a specified time resulting in forfeiture?
 5. Should riparians be given an option to obtain permits for their present rights? If they then obtain a permit, should they receive additional benefits, such as elimination of place of use restrictions?
 - C. If quantification is necessary, how should it be accomplished?
 1. Should individual quantity rights be determined as each riparian right holder applies for a permit?
 2. Are statutory adjudications required?
 - D. If riparian right holders should be required to apply for permits, how should their permit right be defined?

1. How should the quantity of water permitted be determined?
2. If some permitted uses are to be unquantified, how should these be expressed?
3. Should permits for Sacramento-San Joaquin Delta riparian rights include water quality provisions? Should all riparian rights?
4. Should riparian rights included in the permit system remain correlative? Or should riparians have priorities among themselves tied to the date of patent?
5. Should present riparian-appropriative priorities be retained if riparian rights are included in the permit system?
6. Should any public interest terms and conditions be placed upon permits issued to riparian right holders?
7. Should some or all rights included in the permit system be subject to forfeiture for nonuse?
8. Should riparian rights included in the permit system be freed from present place-of-use restrictions? From restrictions on transferability?

II. Should the riparian doctrine be otherwise modified?

A. Should riparian rights be subject to loss for non-use?

1. What should be the period of non-use?
2. How should use be reported?

B. Should the "source of title" doctrine be changed to sever mandatorily riparian rights from a non-contiguous or back parcel, when the parcel is conveyed?

III. Should statements of diversion and use, with provisions for sanctions or forfeiture for noncompliance, be used to obtain information on riparian use? What other information-gathering means are available or should be made available?